

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

LONDON, SATURDAY, JULY 14, 1855.

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I THE FOLLOWING ARE THE MEMBERS WHO HAVE SUBSCRIBED TO THE ROLLS.—
COMMITTEE.
J. Y. WATSON, P.G.S.—CHAIRMAN.

THIRD EDITION.
This day is published, in crown octavo, boards, with Tables, 240pp.
BRITISH MINES CONSIDERED AS A MEANS OF INVESTMENT;
WITH PARTICULARS OF THE PRINCIPAL DIVIDENDS AND PROGRESSIVE MINES IN ENGLAND AND WALES.
THIRD EDITION.
WITH AN APPENDIX, GIVING INFORMATION UP TO THE LATEST PERIOD.
By J. H. MURCHISON, Esq., F.G.S., F.S.S., &c.
London: Mann Nephews, 39, Cornhill. Copies may also be obtained at Mr. Murchison's office, 117, Bishopsgate-street Within; and at the Mining Journal office, 26, Fleet-street, London.

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HOLLOWAY'S OINTMENT AND PILLS EXTRAORDINARY REMEDIES FOR THE CURE OF BAD LEGS.—Extract of a letter from Mr. John Anthony, residing near Llandudvery, dated March 16, 1855.—"To Prof. Holloway. Sir,—I suffered for 16 years with a bad leg, apparently a white swelling, which caused me to keep my bed for two years; from an injury afterwards it formed into a wound, and 16 pieces of bone were taken out. I tried several medical men, but they could not cure my leg. I am, however, happy to say that your ointment and pills effectually healed the wound in about one month."—Sold by all vendors of medicine, and at Prof. Holloway's establishments, 244, Strand, London; and 60, Maiden-lane, New York.

JOINT-STOCK BANKING PROGRESS.

Important changes in our financial and commercial relations are daily passing under review—partly the results of our protracted and ineffectual negotiations for peace, and partly from the belligerent position which we have been driven to assume. In this eventful state of the nation, the system of banking necessarily attracts the public attention, and recent events in reference to a private metropolitan firm, to which it is unnecessary further to allude, strongly influence the community, previously so predisposed, in favour of joint-stock banking companies. A sketch of the origin, rise, progress, and position of joint-stock banking associations cannot fail at the present moment to be of interest to the general trading community. The name of a joint-stock bank naturally associates with it the idea of an extensive proprietary, capital adequate to all demands, the local influence of the members composing it, the selection of competent managers to conduct its affairs, and the superintendence of a vigilant and efficient directorate for its control. It is difficult in theory to conceive any institutions constituted on principles better adapted to secure safety to the public, or advantage to their immediate localities, provided the independence of the institution, in the amount of its capital, in the extent and solvency of its proprietary, and in the ability and integrity of its managers, be unquestionable. Selecting the metropolis as the centre, they form, by their branches, a chain of connection with the most thriving agricultural and manufacturing districts in the provinces, mutually enriching and being enriched.

The Bank of England, having had its origin in the requirements of the country, and holding special relations with the Government, may be emphatically considered as a state bank; and the same observation is applicable to the banks of Scotland and Ireland. Joint-stock banks, for private, irrespective of state purposes, had been eminently successful in Scotland before the introduction of the system into England or Ireland, and had acquired the distinctive term of the "Scottish System." The first joint-stock bank established in London was in 1834, the Northern Banking Company, the Hibernian Joint Stock Banking Company, and the Provincial Bank of Ireland, having been previously founded in that country in the year 1825; and a colonial bank, that of New South Wales, having an office in London, dates from the year 1817. Since the opening of the first joint-stock bank in London, they have been established in all the principal towns of England, several existing in London, in Liverpool, Manchester, and Birmingham. At the close of last year, exclusive of the great National Banks of England, Scotland, and Ireland, there were in full operation 95 joint-stock banking associations in England and Wales, 17 in Scotland, and 8 in Ireland. We have here traced the rapid advance of a system which was thus early characterised by Sir ROBERT PEEL, avowedly the greatest minister of modern times:—"I look," said he, "upon the principle of joint-stock companies as one of the great discoveries of modern times."

I say, further, that if there can be one description of business to which the principle of a joint-stock company can be more applicable than another, it is, under due restrictions, the business of banking."

Passing for the present the vast and varied advantages which the legitimate formation of such institutions must confer upon every trading class in a large community, it is a source of highly interesting enquiry to consider joint-stock banking associations as sources of investment for capital. We begin with the state banks, which we include for mercantile purposes, and we find the shares of the Bank of England, on 1000 paid up, yielding a minimum rate of dividend of 8 per cent.; the Bank of Scotland, on the same amount paid up per share, yielding 7 per cent.; and the Bank of Ireland, on the same amount paid up per share, 9 per cent. Taking the range of the ordinary joint-stock banks of Scotland, we find the British Linen Company, established in 1746, on a paid-up capital of a million sterling, yielding a rate of dividend of 8 per cent. per share; the Dundee Banking Company, established in 1763, with 66 partners, on a paid-up capital of 60,000, yielding a rate of dividend of 8½ per cent.; the Perth Banking Company, established in 1830, with 200 partners, on a paid-up capital of a million sterling, yielding a rate of dividend of 9 per cent.; and the Western Bank of Scotland, including the late Greenock Bank, Ayrshire Banking Company, Dundee Union Bank, and Paisley Commercial Bank, established in 1832, with 1255 partners, on a paid-up capital of 1,500,000, yielding a rate of dividend of 8 per cent. We find the Commercial Bank of Scotland, established in 1810, with 628 partners, on a paid-up capital of 600,000, paying a rate of dividend of 7 per cent. The National Bank of Scotland, established in 1825, with 1604 partners, on a paid-up capital of one million sterling, paid a rate of dividend of 6½ per cent.; the other Scotch joint-stock banks, with very few exceptions, ranking as high as 6 per cent. While Scotland acknowledges her deep obligations for her advance in national importance and commercial wealth to her banking system, we have stated quite sufficient to satisfy the most timid calculator, that she has amply and fully repaid those who confided their money to the support of institutions, which have so pre-eminently tended towards her progressive and present prosperity.

Joint-stock banking in Ireland presents even more favourable results. The Northern Banking Company, with 195 partners, on a paid-up capital of 150,000, yielding a rate of dividend of 10 per cent.; the Provincial Bank of Ireland, on a paid-up capital of 500,000, with 40,000 new shares, and comprising 900 partners, yielding a rate of 8 per cent. dividend, with bonus; the National Bank of Ireland, with a paid-up capital of 450,000, and comprising a proprietary of 810 partners, yielding a rate of dividend of 6 per cent.; the Hibernian Joint-Stock Company, on a paid-up capital of 250,000, yielding a dividend per share of 6 per cent., and the Royal Bank of Ireland, on a paid-up capital of 209,175, with a proprietary of 483 shareholders, yielding a dividend of 6 per cent. interest, and 4 per cent. bonus. When we reflect upon the calamitous condition of Ireland during the last 10 years, and the various gradations of untold being through which she has passed within that period, it must be conceded that her joint-stock banks, which have seen and survived such unprecedented vicissitudes, both agricultural, commercial, and social, bear the most unerring testimony to the value and security of the system.

England and Wales present a very extensive range of observation. The London and Westminster was established in 1834, on a subscribed capital of 5,000,000, with 1,000,000 paid up, the number of shareholders being 1357, and the number of shares issued 50,000; the amount of each share is 100l., on which 20l. has been paid, the last price quoted being 49l., and the rate of dividend paid 16l. per cent. per annum. The London Joint-Stock was established in 1836, with a subscribed capital of 3,000,000, on which 600,000 has been paid up, the number of shareholders being 870, with 60,000 shares issued; on each 50l. share 10l. has been paid up, and the present value of each share is 29l. 15s., the rate of dividend paid being 20l. per cent. on the last year, ending July, 1855, being 10 per cent. dividend and 10 per cent. bonus, free of income tax—a striking instance of prosperity. The other London joint-stock banks indicate prosperity of no ordinary character, all averaging a high rate of dividend; and fully justifying the extension of the system in the metropolis.

We may now select a few instances from the leading provincial districts. The Birmingham Town and District Banking Company, established in 1836, with 206 partners, and a paid-up capital of 75,000, has divided a dividend of 10 per cent., with 10 per cent. bonus. The Birmingham Banking Company, established in 1839, with a proprietary of 420 partners, and a paid-up capital of 200,000, with 52 paid on each share, has paid a rate of dividend of 10 per cent. per annum, and 20s. bonus on each share. The Carlisle City and District Bank, established in 1837, with 246 partners, and 65,000 paid-up capital, yielded a dividend of 16 per cent.; and the Carlisle and Cumberland Banking Company, with 221 partners, and a paid-up capital of 51,925, a rate of dividend of 12 per cent., besides occasional bonuses. The Derby and Derbyshire Banking Company, established in 1833, with a proprietary of 141 partners, and a paid-up capital of 62,600, presents a rate of dividend of 8 per cent., and a bonus of 5s. on every 12l. 10s. paid on each share. The Gloucestershire Banking Company, established in 1831, with 381 partners, and a paid-up capital of 175,000, yields a rate of dividend of 16 per cent. The Halifax Joint-Stock Banking Company, established in 1829, with 114 partners, and a capital of 65,500, shows a rate of dividend of 8½ per cent., and a bonus of 20l. per share; while the Halifax Commercial Banking Company, and the Halifax and Huddersfield Union Banking Company, which were both established on the 1st July, 1836, in the former of which there are 108 partners, with a paid-up capital of 62,500, and in the latter of which there are 265 partners, with a paid-up capital of 169,050, both show a rate of dividend of 10 per cent. Two of the Liverpool joint-stock

banks, with very extensive proprietaries and large paid-up capital, exhibit a rate of dividend of 7 per cent. The Manchester and Liverpool District Banking Company, established in 1839, with a proprietary of 683 partners, and a paid-up capital of 750,000, shows a rate of dividend of 11, on the 10l. paid on each share; and the Manchester and Salford Bank, established in 1836, with 150 partners, and a paid-up capital of 282,000, of 8 per cent., and a bonus of 2½ per cent. The Nottinghamshire Banking Company, established in 1836, with 127 partners, shows a rate of dividend of 10 per cent.; and the Northamptonshire Banking Company, also established in 1836, with 602 partners, shows a rate of dividend of 11 per cent. It is needless to multiply instances, for these which we have enumerated sufficiently show that joint-stock banks are, and have been, almost uniformly and almost equally successful in different and in distant parts of England.

Our review of the joint-stock banking system would be naturally imperfect if we did not include the established Australian and Indian banking associations, and we have now before us a detail of their position down to a recent period, which presents most encouraging features. In the Bank of New South Wales 20l. was the amount paid upon each share, and on the last return the price per share was 35-6l., or 86 per cent. premium, the last dividend paid being 20 per cent. per annum. The price of the shares in the Union Bank of Australia, on which 25l. was paid up, is at the present time 74l., or over 180 per cent. premium, the last dividend paid being 40 per cent. per annum. The amount paid up on each share in the Bank of Australia was 40l., and the price per share on the same day was 85l., or over 102 per cent. premium, the last dividend paid being 15 per cent. The amount paid on each share in the South Australian Banking Company was 25l., and the present price per share is 37½, exclusive of dividend, the last dividend paid being 12 per cent. The same amount was paid on each share in the Oriental Bank Company, and the price was 38-9l., an encouraging premium, the last dividend paid being 14 per cent., and 10s. per share bonus. The sum of 50l. was paid on each share in the Agra and United Service Bank, and the price was 71l., or 42 per cent. premium, the dividend being 9 per cent. per annum; while with the same amount paid up in the Commercial Bank of Bombay the value of the share was 63l. 10s., or 26½ per cent. premium, and the last dividend paid also 9 per cent. Our last Number contained a report of a recent meeting of the proprietors of the Chartered Bank of India, Australia, and China, held on Friday, the 29th of June last, at the South Sea House. That valuable undertaking was established for the great object of affording banking facilities to the extensive and rapidly increasing trade between the Australian colonies, British India, China, and the Eastern Archipelago, a field never before occupied by any similar undertaking. The charter ensures to the shareholders the inestimable protection of limited liability, and as the company has lately secured in the direction an accession of influential connections in the East, and as the demand for banking accommodation is on the increase, we may confidently anticipate that the company will command that success which has attended the Oriental Bank Corporation. The Colonial Bank, at their thirty-fifth half-yearly general meeting, held on Wednesday last, declared a dividend, being at the rate of 5l. per cent. upon the year, the bank paying the income tax, and increasing the reserved fund to 150,125l. 9s. 7d. They announced, also, their determination to apply to Her Majesty's Government for a supplemental Charter, to enable the company to carry out its business after the expiration of the present one, and they expect that it will be granted.

With such a trial of the joint-stock system, both at home and abroad, for the past, and such encouraging prospects for the future, it would be indeed strange if designs were not entertained of extending the benefits and facilities it affords. In former Numbers of our Journal we have explained the principles on which the new joint-stock banks of London are designed to be formed, and we learn that the Bank of England contemplates the formation of a West-end branch, for the accommodation of the Government business. We learn that a treaty has been entered into for the purchase of Her Majesty's Theatre, Pall Mall, for the branch bank, and it is impossible to conceive a more eligible site. It is intended to afford at this branch all the facilities which generally exist at banks, for the purchase, deposit, and transfer of securities; and dividends may be received by customers at the branch in the same way as they are at the head establishment. We also perceive that a proposal has been lately made for the formation of a law bank in the metropolis on the joint-stock principle, which, from the extensive influence and numbers of both branches of the legal profession, ought to prove eminently successful. A very striking prospectus has at the same time appeared for the formation of a company under the name of the Unity Joint-Stock Mutual Banking Association, to which we direct public attention. It must, of course, be formed in conformity with the provisions of the 7th and 8th Vic., a statute specially passed for the purpose, which requires that the shares in every joint-stock banking company to be now formed should be 100l., on which a deposit of 10l. must be paid, and 50 per cent. must be made up per share before business can be commenced. It is intended that the professional, mercantile, and trading interests should be represented in the management, the capital to be 500,000, with power to increase. This sum is to be divided into 5000 shares, of 100l. each, on each of which a deposit of 10l. will be required on allotment, and 40l. on incorporation, thus yielding a paid-up working capital of 250,000. The amount of deposits in the existing London joint-stock banks approaches very nearly 26,000,000 sterling, affording on legitimate principles a certain source of remunerative profits. The prospectus of the newly-proposed association holds out to capitalists peculiar advantages by the introduction of a new principle in banking—viz., to give to its customers as interest on their cash balances, in addition to the ordinary amount allowed on deposit and current accounts, a sum equal to the interest payable to the shareholders. This additional inducement is, of course, not to take effect until after due provision shall have been made for a reserve fund, and for 5 per cent. interest on the paid-up capital. A plan of this nature must necessarily create a strong interest in parties to become customers; it is, however, not intended to be compulsory, and every person may, on opening his account, elect whether he will accept the advantage or not. In other respects, the new institution proposes to adopt the system which has been so prosperous with its predecessors; their success is an unerring guide, while the daily extension of the commercial operations of the country, and the continuous increase of the population, demand such an establishment. The existing London joint-stock banks, by affording facilities to the trading community and by directing capital to profitable uses, have extended and popularised the principles of banking, and we hail their further development as now proposed in the organisation of the Unity Joint-Stock Banking Association.

WROUGHT-IRON CANNON.—The large and beautifully-proportioned wrought-iron cannon constructed at Gosport, in Staffordshire, burst and fell into many pieces on Wednesday, at Woolwich, under the usual charge. The gun was 10½ in the bore, 10 ft. long, and weighed 96 cwt.

IRON BY LONG AND SHORT WEIGHT.—At the last Stafford Assizes, the question of selling iron by the long and imperial weight was raised, in the case of Jones and others v. Jones and others. It has been brought into the Court of Error, when Mr. Justice Manley delivered judgment. The declaration stated that the plaintiffs, at the request of the defendants, bought of them a large quantity, to wit, 240,000 lbs. of good puddling bar-iron, for the sum of 416l.; all the iron to be proved and delivered to the plaintiffs' works at Oldbury, 116l. to be paid in cash, and one bill of 150l. at two months, and 150l. at four months from the time of delivery. The performance of the condition precedent and breach by non-delivery was made defendants pleaded—first, non-acceptance, and secondly, that the contract was made after the passing of the 5th and 6th William IV., cap. 63, relating to weights and measures, and was for the sale and purchase of iron by the ton weight, long weight, consisting of 2500 lbs. avoirdupois, being more than 20 cwt. of the standard weight in the said Act mentioned, contrary to the form of the statute. The verdict was found for the defendants on the second plea, and for the plaintiffs on the first. A rule nisi for the defendants to enter the verdict for the plaintiffs on the second count, and argument, the Court of Exchequer held that the plea was bad. His lordship delivered an elaborate judgment of the Court of Error, affirming the decision of the Court below.

ANCIENT SALT MANUFACTURE OF SOUTH SHIELDS.—The manufacture of salt at South Shields was in former times a matter of great importance, and to this day the names of districts and places in that town bear evidence of the existence of this branch of industry. Pan-ward, Pan-clove, and Pan-ash, indicate that salt was the chief characteristic of these localities. "Shields salt," by the universal consent of a great portion of the inhabitants of the North of England, was held to be superior to any article of that kind in existence. Many families amused themselves in this manufacture, but, alas for the instability of worldly prospects! the salt trade has now become all but extinct in this entire neighbourhood. The great amount of the salt trade in former times has now a large supply from the port of Liverpool, the latter of which has within these 30 years become a very curious circumstance that although Shields has within these 30 years become a very large consumer of salt in her alkali manufactures, she takes it from Shields, the salt springs of Cheshire are infinitely stronger than the sea water at Shields, and we found that the superiority of Shields over Liverpool salt was more in name than in reality. We have been favoured with an old Excise return of the year 1766, giving an account of the quantity of salt made in this neighbourhood for eight years previously, from which we learn that in eight years, from the year 1758 to 1766, the total quantity was 88,886 tons; of which Blyth produced 8339; Hartley, 2633; Sunderland, 10,000; Shields, 74,374; and Horden Pan, 733.—*Sunderland Herald*.

Original Correspondence.

IMPROVEMENTS IN IRON MANUFACTURE.

SIR.—The application to useful purposes of the waste gases given off by blast furnaces, apparently, has at one period or other engaged the attention of the majority of British ironmasters; but, from some unexplained cause, in only a few cases has the experimental application been persevered in. The subject is a most important one, and at the present period of depression in the iron trade, both here and in the United States, as well as in all continental districts, which to a certain extent are affected with every fluctuation in the English market, renders it peculiarly interesting at a time when rigid economy is demanded, and will be a sufficient apology for a few remarks relative to what has been done in certain districts.

During a recent tour through South Staffordshire, particular attention was paid to the economy practised at different works, with a view of determining the principles on which the successful utilisation of the gaseous products seem to depend; for, from the many conflicting statements which have appeared, it is a matter of conjecture whether failure in certain cases has occurred from some inherent quality of the fuel, or from the insufficiency of the arrangements. On these points, however, the disinclination manifested by parties generally to communicate the presumed cause of failure resulted in a very small addition to the previous stock of reliable information on the subject. At more than one-third of the number of blast furnaces there was seen piping, closed orifices, or other remains of unsuccessful attempts to economise, but in no one instance was the principle then in operation. On enquiry as to the immediate or proximate cause of abandonment, the reply invariably was, "it did not answer," accompanied with a remark, either that the furnace did not work so well while it was in operation, or they could not keep up a sufficiency of steam; but very frequently the failure was placed to the character of the fuel. Mr. Blackwell stated, before the Society of Arts, that all attempts made in South Staffordshire had failed from inapplicable arrangements; but this cannot be correct, for the arrangements appear to have been as varied as complete; and it is a remarkable circumstance that, at Mr. Blackwell's works, the Bilston new furnaces, where the recent construction of the furnaces has enabled their proprietor to adopt every improvement that could contribute to success, the principle was applied, but, for some reason other than inapplicable arrangements, was not continued. At the Mosely, Oldbury, Oldbury, Wednesbury Old Park, and other furnaces, the long-established reputation of the proprietors is a sufficient guarantee that the requisite scientific means, as far as the experience obtained of the subject would warrant, were adopted; and we must look to causes other than those given by Mr. Blackwell for an explanation of the general disuse of the gases.

Mr. Blackwell, as also other writers, states that their withdrawal and utilisation has been eminently successful in other districts. If we admit the correctness of these statements, the difficulty of arriving at a satisfactory explanation of the causes which obstruct their successful application in South Staffordshire is greatly increased; for since a further experience has demonstrated that inapplicable arrangements is not sufficient, the cause apparently lies in the qualities of the fuel, the unfavourable form of the furnace, or the inferior heating power of the gases; but on an attentive consideration, it is evident that neither is sufficient, and it is questionable if collectively they satisfactorily account for the general non-success. The coal is not dissimilar in structural arrangement and composition to furnace coals of other districts where the use of the gases has been persevered in; while if there be one condition more favourable than the other to the combustible value of the gases, as Messrs. Bunsen and Playfair state to be the case with raw coal, which yields, during the distillatory process of converting into coke, a quantity of valuable gas, the circumstances of gases having been withdrawn from furnaces work on raw coal, coke, and a mixed burden, should have resulted in the discovery of the condition most favourable to high economy, both in respect of the fuel and the gases evolved. The form of furnace employed in Staffordshire is very similar to those prevailing in Wales and Scotland, and though varying extremely in their diameter and general dimensions, the larger number are probably of a construction superior to the furnaces of these districts. With coal of a superior quality, and furnaces of a form equally in favour of their successful application, it does seem inexplicable that, while the economic use of gas is largely practised in the Welsh, Derbyshire, and Scotch districts, there should be any difficulty in realising similar advantages in South Staffordshire. It is possible, though highly improbable, that the iron ore, or the limestone, or both, yield a deleterious ingredient, which is not the case in other districts. The modes, too, of applying the gases under the boilers may have had something to do with the general non-success, but very limited experiments would have detected any defects capable of being remedied.

In South Wales, wherever the principle of withdrawing the gases has been persevered in, and the previous number of furnaces retained in blast, the number or power of the steam boilers has been largely augmented. In the majority of works, the present plant is fully twice the boiler power of the previous plant, with fires under the boiler. This is the case at the Ebbw Vale, Sirhowy, Victoria, Abersychan, Abernant, Aberdare, Ystalyfera, and other works, examined in the fall of last year; and it may be stated that, with this augmentation of boiler power, entire dependence is rarely placed on the heat communicated by the combustion of the gases for the generation of the steam, a moiety of the quantity produced at these works being generated by the aid of coal fires. The inferior evaporative power of boilers heated with gas being understood, it would have been necessary to have had a larger number of boilers to attain a similar degree of success, but from enquiries it does not appear that the number was augmented. This of itself is a sufficient explanation for the general failure of the Staffordshire experiments. By increasing the number of boilers, or employing others with a larger heating surface, as a compensation for the inferior heating power of the gases, there can be no question but that results may be obtained equally favourable with those reported as occurring in Wales. In several instances it was complained of the withdrawal of the gases, that when in operation the furnace did not work so well as on other occasions. Whether well founded or not, the difficulty of obtaining satisfactory answers from parties having access to private documentary evidence seemed to give a colour to the current unfavourable impression. It is a significant circumstance, too, that Mr. Blackwell, who, from the decided stand he took in the matter, attributing the slowness with which the invention was adopted to prejudice and inferior perceptive powers on the part of the British ironmaster, would naturally adopt the most approved methods of applying it, has not in his latest erected (1854) of the Bilston new furnaces considered it advisable to make provision or erect any appliances for the utilisation of the gases. Yet this furnace was built with the latest improvements, though, from overlooking certain fundamental principles necessary to be observed in the construction and adaptation of furnaces intended to work successfully, it was blown out, after being in blast only a few months, and at date of visit remained standing in the burnt-out condition. On other new furnaces, also, notwithstanding the additional experience gained through the successful working of the gases in Wales, ironmasters seemed to consider it inadvisable to make provision for economising these hitherto waste products.

In answer to enquiries made at the Welsh-furnaces, the workmen and inferior agents generally gave it as their opinion that the furnace did not work so well with the gas-collecting apparatus in operation; the quality of the iron was by them stated to be inferior. On the other hand, the superior agents stated that it exercised no disturbing influence on the operation, a difference of opinion frustrating all attempts to form just ideas on the subject. At other works, where the invention had been experimentally tried, the workmen and agents were unanimous in their condemnation, on account of the variation wrought on the furnace. That certain effects were produced, the alterations in progress and the different plans for collecting seemed to imply.

Hence, it is possible that the slowness with which ironmasters have adopted means for economic application of gases has resulted from certain attendant disadvantages, which it is desirable to understand and remove, and not as Mr. May stated, at the Society of Arts, in March last, from their question then arises, if in this country the withdrawal of the gases from the furnace, or through what cause, is it that the ironmasters succeed in withdrawing and effecting their combustion without such attendant disadvantages? From personal observation, we can state that in the American anthracite furnaces the application of the invention is not attended with any modifying influence on the blast furnace.

The subject is one of great importance to ironmasters generally; its complete elucidation would point out where existing arrangements were

defective, so as to permit of a rigid economy of fuel being practised in every department, and it is believed that parties who have practically tested the working of the new system will confer a lasting boon on physical science by communicating, through your columns, to the less fortunate and over-cautious manufacturer a modicum of their experience on the subject.

July 9.

H. P. JEROME.

STEAM—ITS VALUE AND APPLICATION.

SIR.—"What is truth?" was the question asked by Pilate. The answer, in its universal application, cannot, perhaps, be given in a very definite form; but still it is no hard matter, for all practical purposes, to perceive wherein all human truth has its foundation, how it is deduced, and of what vast importance it is to mankind. Its foundation rests upon those fixed properties, laws, and constitutions, which are found in ourselves and things around us to be annexed to all material matter, all animal organisation, and all mental and moral power.

The subject of this letter requires a survey of but a very small nook of this wide field, which, when the education of all mankind shall have for its basis a knowledge of these laws, properties, and constitutions, their habits and relations one to the other (which, in very truth, are the laws of God made manifest in his works), how prodigiously would the productive resources be increased; how elevated and enlarged the source of recreative pleasure; with what deliberation and moral force would be determined points in which, now, passion is almost the exclusive element, often—too often—leading deeper and deeper into despair.

In exhibiting in detail but a very little nook of this field of truth, I shall, I trust, incidentally illustrate the force of these more general observations. The little nook referred to is that embodied in the steam-engine, and which, when passed rapidly before the mind of the reader, must, I think, carry him step by step to the conclusion that the statements made by me upon this subject may be cavilled at and rejected, just as men have cavilled at and rejected all truth, which bad motives and ignorance have laboured much to misrepresent, but that still it remains, nevertheless; that all the statements I have made are true; and that Englishmen have allowed themselves to be misled, greatly to their injury.

Truth is, in the steam-engine, as in all other cases, based upon those fixed properties which exist independent of us. Such are the facts. That water charged with heat becomes steam; that the same weight of steam at all pressures contains in it the same quantity of heat; that the latent heat diminishes as the sensible heat increases; that as the sensible heat increases, which it does, as the pressure under which the steam is generated is increased, so also does the pressure increase of any given volume and weight of steam; that water, once converted into steam, remains in the shape of steam at all pressures, so long as no heat is allowed to escape from it; that to compress air, as in the receiver of the air-gun, absorbs power, so steam generated under high pressure, and used expansively, will give out increased power in the same ratio; that steam generated under a pressure of 210 lbs. per square inch is in volume but 1.14th of what the same weight of steam is at 15 lbs. per square inch; that fluids press equally in all directions; that, therefore, it is beyond a doubt, if we increase the pressure in a less ratio than we diminish the surface upon which the pressure acts, that the resulting force is less with the greater pressures than with the lesser; that water will generate steam at temperatures dependant upon the pressure acting upon its surface; that water under pressure, and combined with heat, is an explosive compound; that all explosive compounds are dangerous in proportion to quantity, and to diffuse and instantaneous liberation; that coal, when heated in contact with the atmosphere, undergoes rapid decomposition, and that a large mass of hot gases is the result; that heat is imparted to bodies by contact and radiation, so that the larger the surface, and the more immediate the contact of the hot gases with the cooler surface, the more instantaneous and complete is the heat absorbed from the hot gases; that, if heat be applied to one side only of a plate of metal, the thinner and cleaner the metal be, the sooner does it pass through the plate to the water, as in the steam-boiler; that ordinary water contains more or less of solid matter, which is left behind when the water is evaporated, but if water be first distilled, it afterwards is free from solid matter; that when the air is the same in temperature, a brisk wind gives us the sensation of cold to a much greater extent than when the air is calm—the same thing is illustrated in passing rapidly through the air, as on the railway. These are the leading primary conditions we require to know to assist us in determining what are the artificial arrangements we require, so as to obtain the fullest development, the most safe and universal application of a power so extensively and pre-eminently useful—namely, necessary—to modernised humanity, that, under Providence, it is not incorrect to say that the very existence of millions depends upon it; whilst all are far more indebted to it for much they enjoy than they even imagine.

A careful consideration of the primary conditions referred to must lead any unbiased mind to the conclusion that, in the steam-boiler, we require so to diminish the encompassing surface that we neutralise pressure, and, in one word, so adapt means to ends in the boiler, that we get at the same time a large aggregate of exterior surface for the hot gases to act upon, combined with lightness, compactness, simplicity of construction, and a facility of generating the heat in such a way as to prevent, as far as possible, its being otherwise disposed of than in the water in the boiler. Now, whatever evil may be kept up to the contrary, it is not more certain that the sun shines than that my boilers do fulfil these conditions.

In the engine, we must also adopt means so as to fulfil the conditions which these primary conditions plainly point out, and which are—that we must obviate the absurdity of having very high pressure upon very large piston-surfaces; that, if we would avail ourselves of the increased power we see high-pressure steam is capable of producing, we must adapt the engine so to receive the steam that this power be not lost, but its effective force (by being, if I may so say, properly handled in the engine) be brought into a demonstrative shape by the increased amount of work done by any given weight of steam. These conditions being obtained in the engine, it is next to be desired that such engines be reduced to the simplest form and adaptation for general purposes. Here, too, in the engines, I will defy all fair argument or test to show that they do not meet every requirement.

The next essential division is the condensing department. Here we get rid of deposits, and can get the economy of the Cornish engine in all departments, and condense with the atmosphere where water is not obtainable—in one word, here, too, everything is practically realised that the primary conditions suggest.

Now, after 16 years' experience, and, I think I may say, without improper egotism, a thorough knowledge of the subject I am writing upon, I will affirm, with far greater certainty than can attach to the Chancellor of the Exchequer's promises, that I know this country is losing more than 20,000,000l. annually—(to say nothing of the prevention of those frightful sacrifices of human life we have too frequently to deplore),—by allowing itself to be gulled by those whose interests and motives are alike with those who, in all history, have led nations to the very brink of ruin. One thing Englishmen will do well to recollect, which is—that though individuals have a conscience, classes act as if they had none. In a future letter, I will, with as much brevity and clearness as I can, substantiate all I have here advanced, by explaining more in detail the practical proof I have of the authenticity of all I have stated above.

July 10.

THOS. CRADDOCK.

STEAM-BOILERS—CAUSES OF EXPLOSIONS.

SIR.—The remarks in your Journal of Saturday last have reminded me of an intention which I had of forwarding you for insertion the particulars of a little incident that occurred a short time since, and which, I think, can hardly fail to prove interesting to your numerous scientific readers, particularly those who take an active interest in examining the important subject of steam-boiler explosions; they are as follows:—One day, as myself and family were sitting at tea, we were suddenly alarmed by a loud explosion in the tea-kettle, which was boiling over a pretty good fire, and was nearly full of water. The lid of the kettle was blown up against the handle, and fell in its place again. As you may naturally suppose, there were all sorts of conjecture as to the cause of this strange phenomena, but for a time no satisfactory one could be assigned. After tea, my curiosity to know, if possible, the cause of the explosion, led me to examine the interior of the kettle, when, to my surprise, I found a quantity of "fur," or "incrustation," had been removed from the bottom, which, on a little reflection, I concluded had been blown off by steam having been formed between it and the bottom of the kettle.

With the view of ascertaining the correctness of this idea, I emptied the remaining water out of the kettle, which I should state was an iron one, and laid it on the fire on one side, where there was a quantity of fur, and, to my great satisfaction, the experiment was perfectly successful. In a few seconds steam was emitted as copiously from the kettle as though it had contained water, and presently another and louder explosion took place, by which the fur over the heated part was entirely removed. The steam, of course, was generated from the water contained in the fur, and being developed with greater rapidity than it could escape through and from it, accumulated below it, until it had acquired sufficient force to burst off the incrustation, which being convex required a greater force to fracture it than that at the bottom of the kettle (which is flat), which accounts for the more violent explosion.

The fur, both at the bottom and sides of the kettle, was about $\frac{1}{2}$ in. thick; the area of the fur removed from the bottom was about 6 square in., and that of the side a little less, or about 5 square inches. Had the fur been thicker the explosions would,

of course, have been more violent, and the respective areas from which the fur was removed increased, and probably in proportion to about the square of the increase in the thickness of the fur—i.e., if the kettle or boiler would admit of it.

In conclusion, I may remark that there appears to me to be two ways in which the bursting of a steam-boiler may be occasioned from incrustation.—1. From the incrustation below, in which steam may have accumulated, requiring a greater force to fracture it than the boiler; or 2.—From the sudden development of large volumes of steam by the water being brought in contact with the highly-heated plates of the boiler from which the incrustation has been removed.

Norwood, July 8.

J. W.

COAL MINES INSPECTION BILL.

SIR.—We beg to inform you that this bill drags on very slowly through the House of Commons. Since we last wrote you it certainly has made some progress, having got through committee, after being re-committed several times. The report was brought up on Monday, but up to this date it has not made any further progress; it was ordered to be read a third time on Tuesday, and was placed on the orders of the day, in a favourable position. After we had seen the papers delivered to the Members, we were highly delighted at the prospect of getting it out of the hands of the Philistines; but, when in the evening we examined the orders that were posted at the doors of the House of Commons, to our great amazement another list was printed, from which our bill was removed. We applied to several M.P.'s for an explanation; although some of them were experienced Members, they could not inform us by what rule it was done, nor by whose authority. We were determined to know, if possible; after a great deal of trouble, we met one of the Ministers, who said the only reason why it was struck out was that they had not had time to consider the amendments proposed by Messrs. Cayley, Crook, and M'Mahon. On this frivolous excuse they beat it off until to night. The Scotch Education Bill is the first. The only other bills before us are the Irish Tenant Compensation, and Lord Raglan's Annuity Bill. We were very near defeating the coalowners and the Government on Mr. Cayley's division on Monday evening, or rather half-past one on Tuesday morning: 58 voted for all serious accidents being reported to the inspector, and 74 against; the great object of non-fatal accidents being returned in, that where slight explosions or casualties were the most frequent, it would point out to the inspector where most danger existed; and, perhaps, by a timely visit might be the means of preventing some of those dreadful accidents whereby a great number of lives are lost. The opponents of this desirable amendment argued from wrong premises; they stated that all accidents terminated fatally, so some one or more. This is not a fact, it is the very reverse, the great majority are the non-fatal; for one fatal accident there are fifteen otherwise.

Unless Mr. Crook's amendment—"Such inspector is hereby empowered to sue for and recover all such penalties as are by this Act imposed"—is adopted, there is no properly authorised party to enforce the penalties.

There surely never was such a jesuitical clause ever attempted to be inserted in any Act of Parliament before. As it now stands in the bill, if one of the inspectors visits one of the pits in his district, and finds it dangerous, he has power to summon before him the manager, and explain his opinion to him; and if the manager treats his suggestions with ridicule and contempt, the only thing the inspector can do is to send notice in writing to the owner, as it is generally termed "putting the pit under notice." After the owner has got the notice he may burn it, or put it in his pocket, just as he pleases; he is not compelled to remove the danger, nor is he compelled to demand arbitration: the inspectors have no power to compel him to do either. We thought that this was a mistake, but when we pointed it out to one of the leading M.P. coal owners he admitted that it was not a mistake, but done designedly. They all say that it is not fair to be compelled to carry out the recommendations of the inspector, as he may be wrong; well, then we say he ought to be compelled to demand arbitration. On no, no, no, say, that is not right either; it is interfering with us doing as we please; we cannot bear the idea of being compelled to do anything. We then say, if you will not remove the danger, nor demand arbitration, will you post a copy of the inspector's notice upon the pit bank, so that all the men can see it, and free from their contract, and not be compelled to work when their lives are in danger? To this reasonable request they say no also; but on this point we are confident that the clause will be so altered that they will be compelled to do either one thing or the other. As it was decided on the 4th inst. by a majority of 125 against 3, that the inspectors should not have the power to prosecute for damages for any one injured through the negligence of the owner or his agents, it is very desirable that Mr. M'Mahon's clause should be adopted, to enable us to go into the County Court for damages. Lord Campbell's Act, so far as poor colliers disabled for life, or the widows of those who may be killed, are concerned, is sheer mockery, as we told Lord Palmerston in a letter this week: that to tell a poor collier crippled for life, or a widow, that they can get damages at the Assizes under Lord Campbell's Act, is just as bad as putting us in gibbets and hanging a loaf of bread before us, and telling us that we need not die of starvation, as there is bread for us. No crippled collier, or collier's widow in England, Ireland, or Wales has ever got any damages at the Assizes under Lord Campbell's Act, nor has any one so simply; hence the necessity of having the necessary legislative actions: being enabled to have joint actions, and going into County Courts, will have a greater effect in preventing accidents than any other thing.

In your Journal of June 30 appeared a letter from Mr. Handel Cosham; as soon as we saw the name we felt sure that he had commanded the polite attention of the inspectors in some of their reports; and as this same Mr. Cosham is the "hero of Shortwood," as well as Parkfield, we enclose an extract from Mr. Dickinson's report; and if there is one argument, or one case, that we can quote stronger than another in favour of the inspectors having power to enforce their recommendations, it is this case of Mr. Cosham. We will pass it over without comment, as it speaks plainly for itself. We do not know what your other correspondents may do as regards the suggestions of Mr. Cosham, as to the "tendency" of the letters, &c., published in your Journal. As he has just the same authority over us as that which the inspectors referred to in the extract had over him, we have resolved to do by his suggestions as he did by the inspectors—viz., pay no regard to them.

Agar-street, Strand, July 12.

D. SWALLOW; A. TETLOW.

Mr. Inspector Dickinson's last published Report on Coal Mines, p. 37.—"Importance of Plans: Plans of underground workings, though daily becoming more appreciated, have not in every instance received the attention they demand. In an outlying portion of this district, Over Darwen, I have recently found it necessary to direct the attention of the colliery owners to this important subject. The want of proper plans and records, and the Bristol field, in the case of the inundation at the Shortwood Colliery, has also added a similar calamity to the list. In the latter case, when the district was under my care, I pointed out to the proprietors the want of plans, sixteen months before the accident, and was assured they should be obtained forthwith; and the caution had also been afterwards repeated by Mr. Mackworth on his appointment, and still the plans were neglected."

COLLIERY WORKINGS—THE GOVERNMENT INSPECTORS.

SIR.—What object Mr. Herbert Mackworth could have had in view when he indited the letter in your last Journal it would be most difficult to judge of; probably he himself did not very well know why he wrote it. It would almost appear that he apprehends the world is looking to him and to his colleagues for improvement in the process of working mines and collieries. He need not be anxious on that account; the world in general, and the colliery owners in particular, are quite certain that it is not for the sake of the poor fellows who depend on Government Inspectors, London would quickly be in want of fuel, and the coal districts would require a vast augmentation to the number of Union poor houses, and other such like gales.

Mr. Herbert Mackworth goes on to say—"It is now rarely my lot to attend a colliery, and at which it is not evident that the accident might have been prevented if the inspector's cautions or suggestions had been attended to. Alas! how sad and melancholy is this state of things! If the inspector knows that there is necessity for his 'cautions and suggestions,' why in the name of humanity does he not enforce them? If he cannot do this, and so save nearly a thousand lives per annum, his 'cautions and suggestions' are valueless, and his appointment by Government is only another instance of money thrown away on useless salaried officers, or rather of powerless, inefficient, and therefore dangerous interference by the legislative body. If the Act of Parliament does not in a proper manner authorise and support its officers in the discharge of their duty, it is a proof of miserable imbecility, and in such cases should show very clearly that the law should be immediately repealed, besides exhibiting in a melancholy manner that it never should have been framed.

England is inundated and swamped with laws, many of them frivolous in their tenor, loose in their construction, and in the extreme vexatious to the people, without increasing their safety, or improving their morals; witness this very bill of Sir George Grey's, or that other monstrosity projected by Lord Robert Grosvenor. It is to be hoped that these, and all other such Members of Parliament mean well, but it is a fact that they are the cause of the effect of separating by quick degrees the people from the classes immediately above them.

Mr. Herbert Mackworth continues—"During nearly four years' study of accidents in mines I have failed in discovering the legal responsibility which is said to attach to the manager of a colliery; and I have yet to learn that a colliery, or his widow, can obtain redress for the wrongful act, neglect, or default, which breaks down his health, cripples him for life, or condemns him to a violent or needless death." I verily believe the learned inspector; I entirely acquit him of forming a judgment on the subject, so, no doubt, will most of your readers; at the same time, we might all of us generally be the losers if an endeavour to acquire a practical engineering knowledge in his new calling would be more to the purpose than the dry legal study of whether or no a poor widow was entitled to damages. Mr. Editor, I would humbly suggest that the sooner we have new and efficient laws, and new inspectors into the bargain, the sooner we shall cease to fill the land with widows and orphans.

July 8.

A VIEWER.

MINING IN IRELAND—SOUTH CORK, &c., &c.

SIR.—Mr. Foley may well over the indifference of shareholders to attend meetings where his mines are concerned; but that can be a matter of surprise to no one but himself. For these said mines have long ceased either to attract shareholders or their money. When one looks at Mr. Foley's testimonials of their worth, his promises of their early proving themselves, and their present condition, after years of labour and many thousands of pounds have been expended on them, one cannot but lament for the fame of mining engineering. As a shareholder attending the meeting of the South Cork, I could not but feel regret that Mr. Foley had entrusted the management of the mines for two years to a man who (whatever his other qualifications may have been) it was acknowledged had no previous knowledge of mining. Your Irish correspondent said some time since, after reading one of Mr. Grant's exaggerated reports, and of which the board had to bear the odium, that "you could not get rich ore from a hungry lode;" and when a mine for every 1000l. expended on it returns about 100l., Mr. Foley must not be surprised that the shareholders are not in love with it, although it may abound, as he says, "in grey and purple copper, black oxides, rich gossan, beautiful malachite, and be excessively rich in silver." Mr. Foley asks where is the "return money" to be paid? Your advertising columns will answer his question; in return, may I ask him, where are his mines that were to pay immediate dividends? Where is Carbery West? Where is South Cork? Where is Clonakilly, that was reported nearly a year since, in a printed prospectus, to have 60 tons of ore, and now has only 20, although none has been sold? Where are the slate quarries, that have been more fatal to the shareholders than the quarries at Sebastopol to the troops? If Mr. Foley will answer these questions, instead of calumniating men whose misfortune it has been to bring out his abortive schemes and lose their money, he would much more interest the mining world than he does by his long-winded efforts, frothy as his prospectuses. Mr. Foley need not fear that his valuable South Cork Mine will be given away; for as soon as the manager can be got out of the property, and cease wasting its funds by litigation, the mine will be sold by public auction, as was stated at the general meeting, and it is to be hoped the buyers will find them as Mr. Foley and his son-in-law have done, "excessively rich in silver."

Marylebone, July 11.

D. N.

[illegible]

The last Brazilian mail brought particulars respecting the operations of some new copper mines lately opened in one of the provinces of the Montevideo republic. It appears that they have extracted and dispatched some 50 or 60 tons of ore from the copper mines of *Los Hornos*, which is believed to contain 20 per cent. of pure copper; and the operations of the company are likely to be brought to a standstill, inasmuch as it was quite ridiculous to commence, in a country where labor

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, July 14, 1855.

COFFER.			BRASS (sheets) .. p. lb.		
Sheathing and bolts .. p. lb.	0 1 2		Wire ..	1 0 4	
Bottoms ..	0 1 3		Do ..	1 1 4	
Old (Exchange) ..	0 1 0		Foreign ..	23 0 0-23 5 0	
Best selected .. p. ton	120 0 0		To arrive ..	23 10 0	
Tough cake ..	120 0 0				
Tile ..	120 0 0				
South American ..	110 0 0-112 0 0				
IRON.			TIN.		
*Bars, Welsh, in London ..	8 10 0-8 15 0		English, blocks ..	117 0 0	
*Ditto, to arrive ..	8 5 0-8 10 0		Ditto, Bars (in bars) ..	118 0 0	
*Nail rods ..	8 10 0-9 0 0		Ditto, Refined ..	122 0 0	
*Stafford, in London ..	9 10 0		Banco ..	117 0 0 (nom.)	
*Bars ..	9 0 0-9 10 0		Straits ..	115 0 0	
*Hoops ..	9 10 0-10 15 0				
*Sheet, single ..	10 3 0-11 10 0				
Refined metal, ditto ..	4 15 0-5 5 0				
Bars, common, ditto ..	7 10 0-7 15 0				
Ditto, railway, ditto ..	7 10 0				
Ditto, S.W. in Lon. toar ..	13 10 0-15 0 0				
Fig. No. 1, in Clyde ..	3 15 0-3 17 0				
LEAD.			TIN-PLATES.		
English Fig ..	22 10 0		IX Ditto 1st quality ..	1 13 0-1 13 0	
Ditto sheet ..	22 10 0		IX Ditto 2d quality ..	1 11 0-1 11 0	
Ditto red lead ..	22 10 0		IX Ditto 3d quality ..	1 17 0-1 17 0	
Ditto white ..	27 10 0-28 0 0		IX Coke ..	1 6 6-1 7 0	
Ditto patent shot ..	25 10 0		IX Ditto ..	1 12 0-1 13 0	
Spanish, in bond ..	21 0 0-22 0 0				
American ..	none.				
FOREIGN STEEL.			Canada plates .. p. ton		
Swedish, in kegs, to arr. ..	18 0 0		In London; 30s. less at the works.		
Ditto, in faggots ..	22 0 0				
English, Spring ..	21 0 0-22 0 0				
QUICKSILVER .. p. lb.			Yellow Metal Sheathing .. p. lb.		
In Liverpool, 5s. per ton less.	18 10d		Wetterstedt's Pat. Met. ..	11 1/2d	
At the works, 1s. to 1s. 6d. per box less.			Stirling's Non-lamina-	9 0 0-9 2 0	
			ting, or Hardened ..		
			Surface Rails .. p. ton		
			Stirling's Patent ..	5 5 0	
			Toughened Figs ..	4 0 0-4 5 0	
			Ditto ..		
			Indian Charcoal Figs ..	6 10 0	
			In London ..		

REMARKS.—The condition of our market at the present time is very satisfactory, a steady trade being carried on in metals generally, at remunerative prices.

COFFER.—This article has been in great request of late, both for exportation and consumption. Smelters are very firm at the fixed rates, but, at the same time, evince no desire to advance them. Since the last alteration, which was in November, 1853, the market has been so even, that it would only cause an unsettled feeling to arise should any change be announced.

IRON.—Although no extensive orders have been given out for English bars this week, the works continue fully engaged, and prices have in no wise receded. The Staffordshire trade is rather dull, but, according to the ironmasters' quarterly meetings that have taken place during the week, prices seem likely to be maintained. In Scotch pigs, the demand here is trifling; little or no speculation. The market has been at 74s. 6d. until yesterday, when advances reached us that they had been done in Glasgow at 73s. 9d.; sellers, consequently, gave way to 74s., mixed numbers, g.m.b., f.o.b. in the Clyde, which was the nominal quotation on 'Change to-day.

LEAD.—There is not so much enquiry for shipment, and the home trade is not quite so brisk.

SPELTER.—A fall of 7s. 6d. and 10s. per ton has gradually taken place, which may probably promote a better feeling. Speculation in this metal is at a low ebb, unless it could be purchased at very much under the current rates.

TIN.—On the 11th inst., the English smelters announced a further advance of 3s. per ton on blocks, ingots, and bars, and 4s. per ton on refined; and, even at these prices, the market has an evident tendency to advance. Foreign has risen in proportion, Banca being now quoted at 117s.; really good Straits, 115s. 10s. to 116s. per ton. The market is extremely bare of this latter quality, and it is thought the arrivals will not be equal to the customary importations.

TIN-PLATES.—Are now realising good prices, and the advance in the price of tin will tend to make them firm.

STEEL.—A fair demand for foreign. **QUICKSILVER.**—As before.

GLASGOW, JULY 12.—There has been more business in our pig-iron market this week, some holders having brought their stocks pretty freely out for sale; the price, however, has remained steady, at 74s. to 74s. 6d. There is an evident falling off in the demand, both for shipment and consumption, and as these are now less than the production, the drain on the stock has ceased. The market closes to-day at 74s., buyers; 74s. 6d., sellers. No. 1, Gartsherrie, 81s.; No. 1, g.m.b., 75s.; No. 3, g.m.b., 73s. 9d. Shipments for the week ending July 7:—Foreign, 2930 tons; coastwise, 6356 tons = 9286 tons. In the corresponding week of 1854 they were—Foreign, 3753 tons; coastwise, 6919 tons = 10,672 tons.

LIVERPOOL, JULY 12.—Manufactured iron continues in good demand at quotation. American arrivals by last steamer were more cheering; it is evident, however, that our ironmasters would have seriously checked orders from the States, had they advanced prices at present. Pig iron is neglected, and price has dropped a little, market closes quietly; sellers of mixed Nos. warrants at 74s. Tin-plates are in fair demand. Lead and Copper unchanged. The following are the quotations—Merchant bar (Liverpool), 77 1/2s.; Tin-plates, Charcoal IC (Liverpool), per box, 12 1/2s.; Coke, IC, 12 1/2s.

PARIS, JULY 12.—The position of our market is much the same as last week, both as regards the amount of business done, and the prices at which it is done. At Saint Didier, the quantity of English pig-iron imported becomes larger and larger, which, it is thought, will induce the ironmasters there to pay more attention to the manufacture of refined descriptions than they have heretofore. At Hamburg, zinc is quoted at 11 1/2 m.b., at which some little business has been effected. The mining share market has presented little animation during the week, and prices are about the same. The Société des Mines et Fonderies de Cuivre du Rhin have given notice that the interest for the half-year ending July 1st is now payable. At Charleroi, prices are unchanged, and the position of the metal trades is as favourable as ever.

MINES.—A considerable amount of business has been transacted since our last, but with the exception of Alfred Consols and Great Alfred, which have had a great rise, there is no very material alteration in prices as compared with those of last week. In quoting Buller last week, a clerical error occurred; instead of "420 to 440," it should have been "520 to 540." The following are the official prices of the Mining Exchange:—

SATURDAY, JULY 7.—East Bassett, 56 1/2 to 57 1/2; West Frances, 24 1/2 to 25; Coates, 3; Great Wheel Baddern, 8s.; Zion, 20s. 6d. to 21s. 6d.; Marke Valley, 5 1/2 to 5 3/4; South Tamar, 7 1/2; Alfred Consols, 16; Wheel Edward, 3 1/2; Sortridge Consols, 3 1/2 to 3 3/4; Hender, 3 1/2 to 3 3/4.

MONDAY.—Alfred Consols, 16 1/2, 16 3/4, 16 1/2, 16 3/4, 16 1/2, 16 3/4, 16 1/2, 16 3/4; Great Vor, 16s.; Great Alfred, 11 1/2, 12 1/2, 12 1/2, 11 1/2, 11 1/2, 11 1/2; Wheel Hender, 3 1/2 to 3 3/4; East Bassett, 56 to 57 1/2; Rosewarne, 20 1/2, 21, 21 1/2; Trewotha, 21 1/2s. 3d., 22 1/2; Michell, 3s. to 4s.; South Australian Copper, 3 1/2; Cobbe Copper, 3 1/2; Wheel Baddern, 8s. 6d.; Coates, 3 1/2s. 3d.; Treleigh Consols (old), 13s. 6d.; Fort Bowen, 4s. 3d. to 4s. 6d.; East Rose, 28; Sortridge Consols, 2 1/2, 3 1/2, 3 1/2, 3 1/2, 3 1/2; Ivybridge, 1 1/2; South Tamar, 7 1/2 to 7 3/4.

TUESDAY.—Cliff and Wentworth, 17 1/2 to 17 3/4; South Tamar, 7 1/2; Alfred Consols, 17 1/2, 17 3/4, 17 1/2; Bedford United, 10 1/2 to 10 3/4; Sortridge Consols, 3 1/2; North Bassett, 27 1/2 to 28 1/2; Rosewarne, 21 0 to 21 1/2; North Unity, 21s.; New Treleigh, 6s. 6d.; Great Alfred, 12 to 12 1/2.

WEDNESDAY.—Hender, 3 1/2, 4 1/2, 4 1/2, 4 1/2; Great Alfred, 13, 12 1/2, 12 1/2, 13; West Providence, 12 1/2; Devon Great Consols, 37 1/2; Ivybridge, 1 1/2; Alfred Consols, 17 1/2, 18 1/2, 18 1/2; South Tamar, 7 1/2; Rosewarne, 20 1/2 to 21 0.

THURSDAY.—Alfred Consols, 18 1/2, 18 1/2, 18 1/2, 19, 19 1/2; East Bassett, 57; West Frances, 24 1/2 to 25; Forest Mine, 4 1/2; Sortridge Consols, 3 1/2, 3 1/2, 3 1/2, 3 1/2, 3 1/2, 3 1/2; South Tamar, 7 1/2; Ivybridge, 25s. to 27s.; East Gunnis Lake, 4 1/2; Great Baddern, 5s. to 5s. 3d.; Wheel Bassett, 680; West Crinnis, 2 1/2; Treleigh Consols (old), 13s. to 14s.; Liberty, 5s. 9d. to 6s.; Rosewarne, 209.

FRIDAY.—West Providence, 13, 12 1/2, 12; West Crinnis, 3; Old Treleigh, 14s. 6d.; Great Alfred, 13 1/2, 15, 16, 16 1/2, 17 1/2; Alfred Consols, 19 1/2, 19 1/2, 20 1/2, 20 1/2, 21; East Buller, 6 1/2, 6 1/2, 7; North Frances, 21 1/2s. 3d.; Forest Mine, 4 1/2 to 5; Hender, 4 1/2, 4 1/2, 4 1/2; North Bassett, 27 1/2, 28; Sortridge Consols, 3 1/2, 4 to 3 1/2, 3 1/2; Rosewarne, 209; St. John del Rey, 28; Fort Bowen, 4s. 3d., 4s.; Liberty, 6s.

There is no particular news from the mining districts this week. Alfred has a great improvement in the 60 and 80, and shares are likely to rise still higher. The dividend of South Tamar was 6s. per share—a larger one than was expected; the next, we hear, is likely to be 6s. At East Gunnis Lake, the lode in the shaft is turning out 5 tons of rich ore per fm. Bedford United is looking better. During the week a report was received that the lode in the end at Wheel Hender was worth 14s. per fathom, and driving at 30s. per fm. At Wheel Pollard, the engine went to work on

the 2nd inst., and as soon as the shaft is cleared the 11 fm. level will be driven under the gossan and rich copper ore discovered in the adit level. At Collacombe, the 50 fm. level has been extended 6 ft. during the week; the lode is of the same size, worth 60s. per fm.; the adit and the 26 fm. level from Morris's shaft are communicated, and a winze will be sunk on the course of ore. Enquiries have been made for North Robert.

In the Bullion Market.—Mexican and South American dollars, 5s. per oz. Bar silver containing gold, all gold above 5 grs. in the pound to be paid for, 5s. 13d. per oz. standard. Bar silver without gold, 5s. 13d. per oz. standard. Bar gold, 77s. 9d. per oz. standard. Columbian doubloons, 75s. 3d. per oz.

At South Wheel Frances meeting, on the 2d instant, the accounts for April and May showed—Balance end of March, 806s. 10d.; by ore sold, April 5, 3454s. 13s. 10d.; May 3, 3095s. 4s. 6d.; tin sold, June 9, 319s. 5s. 4d.; materials sold, 123s. 5s. 3d.; property tax on dues, half-year, 42s. 19s. 11d.; Labour cost for April, 738s. 6s. 9d.; May, 1149s. 11s. 7d.; merchants' bills, 805s. 11s. 3d.; dues, 477s. 7s. 4d.; property tax, half-year, 285s. 15s.; making profit, 8707s. 6s. 4d.—By dividend, 8730s. (15s. per share), leaves balance to next account, 9561s. 10s. 2d.

At West Wheel Basset bi-monthly meeting, on Wednesday, the accounts showed—Balance from last account, 5555s. 4s.; assessed on tribute, 530s.; copper ore sold, 8706s. 13s. 3d.; tin sold, 34s. 3d.; dividend in May, 3000s.; Labour cost for April, 2160s. 2s. 7d.; May, 2263s. 17s. 7d.; engine, 600s.; tribute, 510s.; rates, &c., 125s. 15s. 4d.; leaving balance, 6312s. 2s. 9d.; from which deduct dividend, 4500s., leaves a balance to next account of 1812s. 2s. 9d. A dividend of 15s. per share was declared. Capt. W. Roberts reported that in the 84 fathom level the lode produced 4 tons of ore per fm., 4 ft. wide; east, driven on a course of ore producing 6 tons per fathom. In the 75 the lode is 3 ft. wide, producing good stones of ore. In the 65 the lode is 1 1/2 ft. wide, very promising. In the 30 east the lode is 3 ft. wide, producing 1 1/2 ton per fm. In the winze under the 32, opening tribute ground. A stoep under the 32 is worth 70s. per fm., and one in the back of the 75 is worth 60s. per fathom. The engine lode in the 30 fm. level is 3 ft. wide, producing 3 tons of ore per fathom; the 29 east, 1 ton. The engine lode in the 84 is very promising. The south lode in the 52 is worth from 20s. to 50s. per fm.; in the 30, 3 tons; in the 42 the lode is worth 50s. per fm. In the mine 164 men are employed on tutwork, and 59 are working 26 pits, varying from 2s. to 13s. in 1l. The discoveries being made are keeping up the stock of ore ground, and when the engine is put to work there is some prospect of still increased returns.

At West Wheel Providence meeting, on Tuesday (Mr. John Balster in the chair), the accounts showed—Sales of black tin, 2424s. 14s. 5d.; ditto copper ore, 471s. 6s. 7d.; ditto arsenic, 62s. 2s. 6d.; carriage of tin, 187s. 11s. 4d.; income-tax overpaid, 41s. 16s. 3d.; debts from tributaries, 21s. 10s. 7d.; = 3022s. 10s. 3d.—By labour cost, March, 500s. 9s. 3d.; April, 533s. 19s. 6d.; May, 597s. 3s.; merchants' bills, 538s. 11s. 6d.; committee's fees, three months, 12s. 12s.; lord's dues, 160s. 18s. 11d.; leaving profit, 626s. 15s. 6d. to which add balance of last account, 611s. 6s. 4d., and deduct dividend, 512s., leaves balance to next account, 1765s. 2s. 4d. A dividend of 512s. (10s. per share) was declared. It was resolved that the committee be authorised to deal with any claim on the part of the Tremayne adventurers, for water raised by the Boundary engine, in any manner they may see most advisable. Messrs. Allender, Balster, Burle, Chaffield, Hinds, Minton, and Prior, were elected the committee for the next three months. Capt. R. Polaise and S. Grose reported that the Tremayne lode in the 90 fm. level was worth 6s. per fm. for copper ore. Michell's shaft was in good tribute ground. Allen's branch was worth 9s. per fm. The stoep in the 80 fm. level was worth 8s. 6d. per fm. The winze under the 60 was worth 7s. 7d. per fm.; the stoep on side branch, 5s. 6d. per fm. The lode in the 100 was worth 7s. 7d. per fm., varying from 2s. 6d. to 13s. 4d. in 1l.

At South Tamar Consols meeting, on Tuesday, the accounts showed a balance in favour of the mine of 2989s. 5s. 3d., and the estimated receipts over payments 4901s. 6s. 9d., dividend of 6s. per share was declared, payable on Wednesday next. Mr. James Wolfstan reported that since the last meeting the engine-shaft has been sunk and made complete to the 148, and the latter level extended south about 3 fms. The lode in the 148 is 4 ft. wide, composed of horn and fluor-spar, and yielding 7 cwt. of ore per fm. In the 136 the lode is 3 1/2 ft. wide, at present yielding 12 cwt. of ore per fm. The lode in the 112 is yielding 12 cwt. per fm.—North Mine: Smith's shaft has been sunk 2 fms. under the 100; the lode in the shaft is 2 1/2 ft. wide, worth 9 cwt. per fm., and is a very promising lode. The stoep throughout the mine are looking and yielding well, and the surface work and machinery are in good order. The ore ground laid open during the last three months has rather exceeded that which has been taken away; the reserve, therefore, are fully equal to what they were. Mr. Wolfstan calculated the monthly returns would continue at about 120 tons.

At North Wheel Damsel meeting, on Thursday (Mr. James Lane in the chair), the accounts showed—Balance last account, 291s. 7s. 9d.; tin sold, 890s. 19s. 6d.; copper ore sold, 540s. 4s. 10d.; materials, 1841s. 16s. 10d.; = 2161s. 14s. 2d.—By labour cost, eight months, 1102s. 5s. 2d.; merchants' bills, 254s. 6s. 5d.; lord's dues, 41s. 16s. 11d.; stamps rent, three years, 99s. 6s. 4d.; lease of Lower Trevelthan, 52s. 10s.; law charges, 10s. 9s. 9d.; leaving in hand, 604s. 6s. 5d. It having at a previous meeting been resolved to abandon the mine, and wind-up the company, the materials have been sold, realising 698s. 18s. 7d., exclusive of the engine, which was bought in by Mr. Pryor at 270s. A dividend of 1s. 6d. per share was declared, and another 1s. per share is expected. A new company will be formed to work the Lower Trevelthan sett, the shareholders in North Wheel Damsel to have the option of taking a proportionate interest as they held in that company.

At the Mill Pool Mine meeting, on the 29th June, the accounts showed—Balance from last account, 1521s. 17s.; labour cost, February, 182s. 1s. 10d.; March, 247s. 10s. 1d.; April, 250s. 15s.; merchants' bills, 330s. 18s. 1d.; = 1157s. 9s. 3d.—By gold (less lord's dues), 54s. 16s.; 931s. 15s. leaving balance against adventurers, 225s. 17s. 3d. A call of 5s. per share was made. Capt. Oake's salary was increased 21s. per month, for attending the dressing and assaying the tin. The purser's salary was also increased 21s. per month for keeping the books. Capt. M. White and W. Oake reported that the engine-shaft was 6 fms. under the 56 fm. level. In the 56 fm. level the lode was 2 ft. wide, worth 6s. to 10s. per fm. for tin; 2 fms. under the 10 the lode was 2 ft. wide, producing tinstuff. In the back of the 10 there were 15 men at work on tribute, at 12s. in 1l. The raisings of tinstuff were estimated the same for the current three months as the last.

At the St. Day United Mines meeting, on 26th June, the accounts for four months ending April showed—Balance at end of Dec., 8527s. 17s. 8d.; ores sold in March and May, 4330s. 13s. 6d.; sale of old iron, 33s. 6s.; Wheel Henry, for four months' water-charge, 80s.; = 13,171s. 17s. 2d.—Mine costs and merchants' bills for four months ending April, 9145s. 13s. 9d.; last instalment of the purchase of one-third of the Consolidated Mines and materials, 800s.; leaving balance in favour of adventurers, 3226s. 3s. 5d.

At the Kilbricken Mine meeting, on Thursday (Mr. H. Hoppe in the chair), the accounts showed—Mine cost, Oct. to May, 2442s. 13s. 7d.; merchants' bills, &c., 1820s. 6s. 3d.; = 4262s. 19s. 10d.—Balance from last account, 645s. 5s. 10d.; and blende, 571s. 10s. 9d.; ore sold, 1419s. 4s. 3d.; leaving balance against adventurers, 1261s. 2s. 2d. A call of 5s. per share was made, and the committee were authorised to apply to the bankers for a loan, on account of the company, not exceeding 600s. Messrs. Byron and Thornton were appointed auditors, the sum of 2s. 2s. being voted for their trouble. The committee of management were re-elected, and the proceedings terminated with a vote of thanks to the Chairman. The report will be found amongst the British Mines.

At the Wheel Orebor general meeting, yesterday (Friday), the accounts showed a cash balance of 113s. 19s. 8d. in hand, and a balance of 741s. 11s. 8d. required before the next meeting, previous to which, however, there will be two months' driven through the lode in the 44 and 40 fm. levels, and as the ground was improved, it is argued well for the productiveness of the lode. In the rise in the back of the 4 the lode is a good course of ore, worth from 2 to 3 tons of ore per fathom; and immediately over this rise, in the bottom of the 44, the lode is very promising, and worth full 1 ton per fm. The pitch in the back of the 54 was worth 1 1/2 ton per fathom. The estimated quantity of ore in reserve is 775 tons, being an increase over the estimate at last meeting, notwithstanding the increase in the samplings. No call was made at the meeting.

At Tamar Maria Mine meeting, on Thursday (Mr. S. Weatherley in the chair), the accounts showed—Labour cost and office expenses, six months, to end of June, 296s. 11s. 9d.; merchants' bills, 271s. 10s. 6d.; sundries, 12s.—236s. 14s. 5d.—By balance brought forward, 119s. 9s. 3d.; leaving balance against mine, 117s. 5s. 1d. The estimate of assets over liabilities was 150s. 16s. 11d. A call of 1s. 3d. per share was made, and the committee were requested to forfeit all shares on which the call is not paid within 21 days. It was resolved that the shaft be continued, to ascertain the value of No. 4 lode. The committee reported that No. 4 lode in the adit level had improved. They thought it advisable to have the mine inspected by Capt. W. Richards, of Hingston Down, who was of opinion, and it is generally considered, that it is worthy of a more full and perfect exploration. A new shaft has accordingly been commenced at the end of the present eastern level, which will soon give an insight into the value of the mine. Capt. Hodde reported that the new shaft was progressing favourably, and that appearances held out the hope that the lode would soon change for the better.

At East Tamar Consols meeting, on Tuesday, the accounts showed—Balance last account, 213s. 19s. 9d.; lead ore sold, 300s. 17s.; fluor-spar, 59s. 5s.; calls, 539s. 6s. 6d.; = 1172s. 2s. 3d.—Labour cost, March, 215s. 16s.; April, 143s. 16s.; May, 237s. 17s. 5d.; merchants' bills, 375s. 6s. 3d.; office expenses, 27s. 8s.; discount, 5s. 6d.; leaving balance in hand, 179s. 13s. 2d. The estimate of expenses over receipts up to the period of the next meeting in October was 544s. 2s. 10d. A call of 2s. per share was made. The secretary stated that out of 8024 shares forfeited at last meeting for non-payment, 1468 had been restored, the holders having paid. It was resolved that 651 shares be absolutely forfeited, but may be restored on payment of the two calls of 1s. and 2s. in 21 days. Captain J. Wolfstan reported no favourable alteration in the several ends south of Gullett's shaft; he recommended to suspend them, and resume sinking the shaft, and drive the 90 west of Furse Hill shaft, limiting the operations to these two points; so this recommendation the meeting assented.

At Bassett Graze Mine meeting, on the 5th inst. (Mr. M. Kenworthy in the chair), the accounts showed—Balance last account, 297s. 6s. 7d.; labour cost for April, 1367s. 7s.; May, 124s. 19s. 3d.; merchants' bills, 139s. 3s. 8d.; office expenses, 317s. 14s. 9d.; discount, 1s. 10d.; = 723s. 12s. 5d.—By blende sold, 1041s. 4s. 10d.; tinstuff, 12s. 18s. 4d.; calls, 264s.; leaving balance against the mine, 342s. 9s. 3d. A call of 2s. per share was made. The report of Capt. J. Rogers will be found among our Mining Correspondence.

At the Camel Slate Quarry (Wadebridge) meeting, on the 5th inst., the accounts to end of May were audited and passed. The call made at the last meeting was after the rate of 50s. per share, and it was satisfactory to the meeting to hear that it had been fully paid up. The works were reported as proceeding in a satisfactory manner, the quantity of slates raised in June being upwards of 15,000 ft., many slates containing from 40 to 60 ft. of good quality. The present steam engine, 26-in. cylinder, does the work of drawing the stone and pumping the water admirably, and the new engine, together with the planes, saws, tubbing down, and other machinery, are expected to be at work within a month. The parties present were much pleased with the progress of the undertaking, and there is no doubt, if the company be properly conducted with the energy and determination at present evinced, that the proprietors will be remunerated for the outlay already made and hereafter contemplated. The calls made up to and including 60s. per share at the meeting, have amounted to 240s. per 32d share. The company are now prepared to sell slates and flooring, and which can be put on board vessels of large burthen at their wharves, adjoining the works, and on the River Camel, within the port of Padstow.

At Pendarves and St. Aubyn Consols meeting, on Wednesday (Mr. M. Kenworthy in the chair), the accounts showed—Balance last account, 491s. 3s. 6d.; labour cost, April, 174s. 13s. 6d.; May, 147s. 19s. 10d.; merchants' bills, 233s. 6s. 6d.; office expenses, 24s. 19s. 6d.; = 1076s. 17s. 8d.—By calls, 480s. 10s.; leaving balance against the mine, 596s. 7s. A call of 2s. per share was made, and the purser was directed to see all holders in arrears, if needful.

At North Roskell Mine meeting, on Monday, the accounts showed—Balance last account, 182s. 2s. 5d.; ore sold, 296s. 13s. 10d.; = 3100s. 16s. 3d.—Mine costs and merchants' bills for April and May, 3949s. 1s. 6d.; leaving balance against the adventurers, 1017s. 11s. 9d.

At Bell and Lanarth Mine meeting, on Tuesday, the accounts showed—Balance last account, 941s. 1s. 11d.; costs and merchants' bills for four months, ending May, 182s. 1s. 1d.; law charges—suit of S. Perkes, 176s. 11s. 1d.; and R. S. Stokes, suing defaulters, 5s. 3s. 1d.; = 452s. 1s. 2d.—By call in March, 253s. 1s. 2d., for chain, 1s. 6s.; leaving balance against the adventurers, 173s. 13s. 2s. A call of 10s. per share was made.

At Wheel Sidney meeting, on 27th June, the accounts showed—Balance from last accounts, 187s. 6s. 10d.; costs and bills for April and May, 544s. 7s. 3s.; = 731s. 14s. 1d.—Ores sold, 529s. 3s. 10d.; leaving balance against adventurers, 202s. 11s. 7d.

Foxdale, Vale of Towy, Maesyrwddu, Coetia Llys, Deep Level, Tal-fero, Holywell Level, Orsedd, Merllyn, Penyllen, Brynford Hall, Speedwell, Sted-ard, Tymen, Llanur, Dwygwyn, Rhosyddol, and Round Hill, have sold lead ore. Great Beam, Wheel Kitty (St. Agnes), Boscean, Porkella United, and Tavistock United, have sold black tin.</

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

THE POSTAGE STAMP—AN UNSTAMPED JOURNAL.—By the communications we have received from subscribers, in town and country, our intention to continue stamping the entire impression of the Journal evidently does not meet approval, we have, therefore, decided on PUBLISHING AN UNSTAMPED EDITION, for the benefit of those who may feel disposed to avail themselves of it. The charge for the Journal, therefore, is,—

STAMPED SIXPENCE EACH.
UNSTAMPED FIVEPENCE EACH.

The advantage of the stamped copy, that it can be posted, and re-posted, during 15 days—care being always taken that the stamp is to be plainly seen,—while the unstamped will be sent to postal charge each time of transmission. Those of our readers who may wish to obtain the unstamped Journal can procure it on arranging with their respective agents.

CAN SPARKS OF EXPLODED GUNPOWDER BE PREVENTED?—Sir: Can any of your chemical correspondents throw light on this question?—If gunpowder be placed within a canister, or if a cartridge be made round, so as to contain $\frac{1}{4}$ lb. of powder, and then placed in a very thin canister of tin, or pasteboard, with a small space to be filled up with carbonic acid gas, will it remain carbonic acid? If it were confined in a hole (100° Fahr.), and the gunpowder exploded, will it render the sparks of the gunpowder very dark, and still have the full benefit of the blast of gunpowder? If any of your correspondents who have facilities for making such an experiment will do so, I shall be glad to give all the practical information on the various modes of blasting rock, or sinking, drifting, and mining they may require.—A MINER: July 10.

LOUISE MINING COMPANY.—The shares of this company are at the present time at a nominal price, the success of future operations depending upon the raising of the additional capital required by the Oshornof Company.

"J. L." (Birmingham).—The E-pedal Nickel Works are not far from Gussal, in the valley of Gulbrandsdal; the Medium Works are about 70 miles from Christiania; the Schanzen Mines are in Sweden, but close to the Norwegian frontier: they have been worked for a considerable period. A company is in course of formation, for the purpose of developing the large deposits of copper which are known to exist in the district.

AUSTRALIAN COLONIAL LAND AND MINING COMPANY.—The estate of this company, near the Hunter River, is stated to be worth 220,000*l.*, in addition to the minerals which are below the surface. A committee of investigation was some time since appointed, but the result of their labours have never been published: the shareholders who appointed these gentlemen should call upon them for their report. With the Ave-Maria Company, last year, a similar committee was appointed, and nothing arrived at. The secretary of that company is now deceased, the books are not forthcoming, and consequently the most blameable parties have been allowed to escape that punishment which justice would have awarded them. In this instance the shareholders should exert themselves, if they wish to obtain their rights. If they do not look after their own interests, it is impossible for others to do so. At the present period gold mining may be said to be in general disrepute.

LOUISE MINING COMPANY.—Sir: The management of this undertaking having been the subject of severe condemnation in your Journal, and one writer having stated that the mine is held by a few gentlemen, permit me to ask if this is so? or if the information said to have been received from Germany is correct?—INQUIRER.

MINE JOBBING.—Sir: Some months since I received two different letters, signed "Watson and Ennor," recommending me to exchange Trebane shares for some others—I think West Providence was named. You may, therefore, imagine my astonishment on attending a meeting of the Trebane Mine, shortly afterwards, at finding Mr. Ennor sitting as chairman; the management of the mine taken from Cornwall, and paid auditors appointed in London. I write this in consequence of seeing a very proper and well-written letter in your last Journal, signed "Mining Jobbery."—FREDERICK SCHULTZ, *4, Dyer's Buildings, Holborn, July 7.*

AUSTRALIAN CORDELLERA GOLD MINING COMPANY.—Sir: Will you allow me to ask, through your Journal, where the offices of this company are situated, and when the contemplated movement will be made to request the directors to let the shareholders know how the money has been managed which was entrusted to their care?—A SHAREHOLDER: *Norwood, July 9.*

BLANVON IRON AND COAL COMPANY.—Sir: I read the letter of your correspondent, "An Exposer of Abuses," with pleasure and pain; the former for the able manner in which the writer states the case, and pain at the conclusion he has arrived at to sell the whole concern. Why, Sir, the dispute amongst us is bad management in London—an improper system in working out the details of the mine. The directors have been reckless in expenditure, undoing everything, perfecting nothing—entering into undertakings without counting the cost; the profits have been, in fact, swamped by trying their hands at experimenting. Hence have crept in abuses that have caused our present difficulties, and no one can see the conclusion; directors, officers, or shareholders do not know our actual position. On the accounts produced not the slightest reliance can be placed; everything dark in aspect. My advice to every shareholder is, "hold on;" turn out the directors; sift every transaction, and clear the whole concern of incumbrances: it will be of little avail if this be not done. Meddling with the affair without touching the root will make bad worse; therefore, I again say—Unite, and protect what is left of your property.—DIVIDEND: *July 12.*

"T. G. B." (Swansea).—One of the best works on the subject is *Karsten's Metallurgy*. The volumes are illustrated with sections and plans of the various furnaces in operation in different parts of the world.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—Sir: I have received a circular from Mr. W. Searl, the chairman of the committee of shareholders appointed to confer with the directors. By this I am informed that the debts of the company are now 12,200*l.*; the assets are 8000*l.*, 8000*l.* of which consists of quartz to be crushed as soon as the machinery is put in order. This gentleman further states it fully confirms Sir Henry Huntley's original estimate. I do not know what faith there is to be placed in any statement emanating from that gentleman: hitherto all his estimates have been false, and his calculations erroneous. I had thought, from the report of the meeting, that we were to have but one superintendent. It is far better to lose the little we have embarked, than subscribe further to incompetence and arrogance. If the directors were to state that the governing expenses should be reduced, there might be some hopes, but until that period no confidence will be entertained. This is not only my opinion, but that of numerous country shareholders.—AN ORIGINAL ALLOTTEE: *Birmingham, July 13.*

"C. M." (Edinburgh).—Appointments are not always given according to qualification: when they are so, it is the exception, the rule being the contrary. We certainly do not see that experience acquired in Spain is a particular recommendation for employment in the Scandinavian peninsula. The mines may be good; but if directed by incompetence, it cannot be expected they will be profitable.

GREAT HEWAS MINES.—We have not space for the letter of Mr. Joseph Lawson, who condemns the conduct of "A Shareholder" in complaining of Captain Webb's management. From long acquaintance, Mr. Lawson considers Captain Webb an able miner and honest man, and not capable of the conduct attributed.

TELEOGAN MINE.—Sir: Referring to the remarks in last week's Journal, we beg to observe that your correspondent, "W. H.," is a holder of five shares in this mine, which cost him 35*l.* per share. At the time he bought the shares Bullers were sold to us at 1250*l.*, and are now only 450*l.*. Pen-y-Gelli were sold to us at 25*l.* per share, and enough 5*l.* per share has been since paid in calls as at present worth only 1*l.* per share. On the 31st May, we gave to a shareholder in Teleogan 15*l.* per share for 255 shares; therefore, the decline in the value of Teleogan is not to be compared with that of mines generally at the present moment. Respecting the prospects of the mine, we are advised by competent judges that the character of the lodes discovered justify the anticipation of results equal to East Wheel Row, its neighbour. Your correspondent, "W. H.," has had ample opportunity to have the mine inspected by competent authority. His disappointment is clearly one as applicable to Consols, and every other public security that has been depressed by the war, as to Teleogan. The mine is now being nursed until the whole capital subscribed is paid; in the interim meetings of the shareholders would be useless. This mine at least has the advantage of not making calls, neither of requiring further calls, until the mine has been expended; and immediately the subscribed capital is available for the full working of the mine, the usual meetings will be convened.—J. S. TRIPP AND CO.: *London, July 13.*

"G. E." (Newcastle-upon-Tyne).—The New South Wales Gold Mining Company was wound-up about two years since; the solicitors were Messrs. Armstrong and Westbrook. The report at one period stated that a portion of the estate had been sold for 50,000*l.*; we have no means of ascertaining whether this was the case; it is, however, highly problematical. During the gold mining mania, all that was reported by the jobbers was credulously received by the public.

AUSTRALIAN CORDELLERA GOLD MINING COMPANY.—This company has been before the Master in Chancery. The secretary and purser was Mr. Warwick Hunt. The report issued some time since announced the determination of the directors to wind-up the concern. There are no hopes of any successful issue being arrived at.

"C. B. D." (Anglesea).—There are no tables published to calculate the sinkage of copper ore by the 7000 grs. All the stamped editions of the *Mining Journal* will be so folded that the Post-Office officials will be enabled to see the stamp, unless they wilfully overlook it.

LOUISE MINING COMPANY.—Sir: I have invested a large amount in this company, and, I fear, sustained a serious loss; I should, therefore, feel obliged if the directors would give me some information, as upon applying to Mr. Keckhoefer, I find that no reports have been received from Germany.—L. M. C.: *July 12.*

"One who has learned Caution" (Brighton).—The Lake Bathurst Company, as well as its directors, has obtained an unusual degree of notoriety. It is useless further to allude to the constitution of that company, the whole of its proceedings having been reported in the law courts. With regard to the bank, we do not pretend to give any opinion of its solvency. Mr. Bagshaw, M.P., who was a director of the Lake Bathurst, is one of the directors of the bank in question.

"C. F. W." (Hoxton).—Telluric silver is generally found uncrystallised, in coarse-grained masses; colour between steel grey and lead grey, lustre metallic, soft and partially malleable. Before the blowpipe, on charcoal, it fuses into a black mass, which on cooling appears covered with numerous minute specks of metallic silver; in the matrix it fuses, and colours the glass yellow, and is soluble in nitric acid, especially if heated. It is found in the silver mines of Savodinski, in the Altai Mountains, Siberia.

GREAT WHEAL MARTHA.—We have received a further communication from "L. H." in reply to "Canadian," but which is too long for insertion, particularly as being merely theoretical speculation, on a subject which can only be proved by practical exploration. In answer to the observation that mines which have made ore at shallow sinkings seldom prove rich in depth, he instances the cases of Great Consols, Wheal Unity, Wheal Friendship, Stridridge, and others, which produced ore near the surface, and continued rich in depth. The writing, as well as the dictation, is so obscure that we can scarcely understand the meaning intended to be conveyed, but it appears to us the author considers the Wheal Martha lode runs through the Slieve Mine, that the latter has improved in the 50 fathom level, that a batch of ore, even from the 40, has been sold at an improved price, and that he thinks this mine will soon pay; that from all the indications in Wheal Martha, he considers the set is well worthy of further trial, and that he has good hopes as to the results.

The communication of Mr. Handel Cossam, in reply to Mr. Herbert Mackworth, in last week's Journal, shall appear next week.

GREAT WHEAL MARTHA.—Sir: Allow me to suggest that the adventurers in this mine should insist upon borings being executed upon the system of Mr. Kind (see *Mining Journal*, Jan. 27), before they sanction any further outlay, to a depth of at least 100 fms. This course would be far preferable to sinking a shaft to that depth, as the expense would be but a per centage upon the amount necessary to sink a shaft to the depth of 100 fms.—AN ENGINEER: *Westminster, July 11.*

ASTURIAN MINING COMPANY.—The communication of "A Shareholder," detailing the present position of this association, together with an account of M. de Grimaud, the present grant's management, is unavoidably postponed.

We regret to receive so many complaints respecting the operation of the new Postage Law. In such a change from an established usage inconvenience must arise, but we trust that in a few weeks all irregularities will be overcome, and our subscribers be regularly supplied, with the Stamped or Unstamped Edition, as they may prefer.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JULY 14, 1855.

A further communication from the deputies of the operative colliers appears in another column, containing "a plain and unvarnished tale" as to the system of legislation that has been adopted on the Coal Mines Inspection bill. Votes in Parliament are at this moment too important to a disjointed and tottering Administration to permit the Members of the present Government to adopt a bold or honest tone towards the coal proprietors; and, accordingly the representations of the deputation have been disregarded, and their too sanguine anticipations disappointed. The hour selected for the third reading of the bill, after one o'clock on Thursday morning, was a plain intimation that fair, free, and full discussion on the merits of clauses to be proposed was not the object, and that a pre-determination existed on the part of the authorities to press the bill through the House of Commons unaltered, and, of course, unimproved.

Mr. EDWARD STILLINGFLEET CAYLEY, Member for the North Riding of Yorkshire, clearly pointed out the manifold imperfections in the bill, which did not increase, but rather tended to diminish, the powers of inspection. He complained that influential coal proprietors had combined with the Government to render the measure as complicated, and as ineffectual, as possible. By the fifth section of the bill, as it then stood, a very cumbersome and absurd mode of arbitration was provided in case of any dispute between the coalowner and the local inspector about the special rules to be adopted in a colliery; but he, Mr. CAYLEY, would rather suggest that in such cases the coalowner should appoint one arbitrator and the inspector another, and that if they could not agree then, that an umpire should be appointed by the Secretary of State. This reasonable proposition was opposed by Sir GEORGE GREY, who objected to any renewal of a discussion on a point which had on a previous day occupied the committee. As the clause was then settled, the coalowner would name three practical and experienced engineers, and if the Secretary of State did not consider them impartial referees, the matter would go to arbitration, he naming one arbitrator, the coalowner another. This he conceived was likely to give general satisfaction, and the House obeyed the dictation of the Minister.

Mr. CAYLEY then proposed the following clause, which was intended to afford to poor men employed in collieries a cheaper means of obtaining redress for injuries, which they might sustain, by enabling several to bring a joint action for damages:—

"All, or any of the persons injured, and the representatives of the persons killed in any one accident, may bring a joint action for the recovery of damages, and at the trial thereof the damages shall be assessed separately to each of the joint plaintiffs; any of them who shall not recover more than 20*l.* shall not have their costs, unless the judge at trial shall otherwise order; any of them who shall recover 20*l.*, or over that sum, shall have their costs: provided always, that the settlement of the claim of any of the joint plaintiffs, or their withdrawal from the action, shall not in any way affect the right of the other plaintiffs to continue the action; and the plaintiffs so far from time to time settling or withdrawing, shall be liable to them for their proportion of the costs previously incurred."

This clause was strongly opposed by the ATTORNEY-GENERAL, who probably conceived that it would interfere with the prospects of the lawyers, who thrive by the multiplicity of suits, and Mr. CAYLEY was forced to withdraw it.

Mr. M'MAHON moved the following clause, to come in after clause 10:—

"If any injury shall arise to any workman, or other person employed in any coal mine or colliery, through the wrongful act, neglect, or default of the owner of such coal mine or colliery, or of his agent, such workman, or other person so employed as aforesaid, may sue for such injury, or, in case of his death from such injury, his executor or administrator may sue, under the Act of the 10th year of Her Majesty, cap. 93, intituled 'An Act for Compensating the Families of Persons Killed by Accidents,' in the County Court of the district in which such mine or colliery is situated, provided that the amount of the damages or compensation claimed in such suit does not exceed the sum of 300*l.*'"

The ATTORNEY-GENERAL objected to the clause, as constituting an exceptional extension to the jurisdiction of the County Courts. The clause was negatived.

Mr. CAYLEY then moved to insert an amendment, that notice of the mine being in a dangerous state should be posted at the pit's bank, which reasonable and salutary proposition was opposed by Sir GEORGE GREY, on the ground that there were practical difficulties. As the Secretary of State did not condescend to name them, we cannot help thinking those difficulties in a great measure imaginary; the House, however, without discussion, deemed them real, and negatived the amendment by a majority of 35, 48 voting for the clause, and 83 against it. Mr. CAYLEY next moved an amendment, requiring that a report should be made of all cases of accident resulting in bodily injury requiring medical attendance. Sir GEORGE GREY observed that this question had been fully discussed in committee and on the report, and it had been decided that these cases did not stand upon the same footing as accidents in factories. The amendment was ultimately negatived without a division, and the bill then passed; and thus one of the most imperfect specimens of legislative inefficiency upon the statute book has become law. We have done our duty to the public in arraigning its progress in every stage; and our humble efforts shall not cease to press upon the country the necessity of passing a proper bill, suited to the requirements of the vast collieries of Great Britain, in the next session of Parliament.

The resistance in Parliament on the part of the great capitalists to the bill for limiting liability in joint-stock associations has, we rejoice to perceive, signally failed, and we hope to see this highly important measure speedily enrolled amongst the established laws of the country. During the discussions, it appeared that an important principle had been introduced into the bill—viz., a provision relieving any party who had invested his capital in a company clothed with the protection of limited liability from all future liability, if he duly registered notice of his withdrawal three months previous to its failure or dissolution. This enactment is quite consistent with the principle which the measure is intended to legislate, and had been previously adopted in many chartered and registered companies, established even under the existing laws. The assignment of shares has been held to relieve parties from future liability, even in cost-book mining companies; and as perpetual responsibility would be opposed to every principle of justice or equity, no sound reason can be assigned for refusing to a party so inclined the power of retiring after reasonable notice. As registration is made an essential element in the proposed measure, both in order to ascertain original as well as retiring members, considerable facilities must be afforded, in order to render enquiries satisfactory; and, perhaps, if the system of limited liability should extend, it may be necessary to establish local registration in certain districts.

Although the measure has been framed as cautiously as possible, to prevent all anticipated dangers, and the advantages it is destined to confer have been circumscribed within far too narrow a circle, it has found zealous opponents in Parliament, and is known to be distasteful to extensive capitalists. It has been alleged as a reproach that its principle is imported from the codes of foreign states, particularly from that of France; it is, however, observable that there is a marked distinction between the associations which this measure is designed to legalise and the societies generally denominated *societes en commandite*. A company of the latter description is invariably composed of one or more ostensible partners, liable at all times, and without any limitation, for the debts of the body; with whom are, however, combined one or more less prominent partners, termed *commanditaires*, responsible only to the extent of their subscribed liabilities. By the Commercial Code of France, the names of the partners in such associations are required to be registered and published, together with the sums which the *commanditaires* have subscribed, or have contracted to supply. The *commanditaires* may be, therefore, considered as what we term sleeping partners, and this system was to a great degree pursued in the Anonymous Partnership Act of Ireland. That measure was for many reasons unsuccessful in practice, and we confess we much prefer the system adopted in the present bill, equalising the powers as well as the

responsibilities of all the shareholders. Mr. BOUVIER, the Vice-President of the Board of Trade, when recently taunted in the House of Commons with having without acknowledgment adopted the Act of the Irish Parliament, correctly stated that its requirements with respect to registration had been so very strict, and were so difficult to be complied with, as to have defeated its practical operation. It is to be hoped that the restrictive and registration clauses introduced into the present bill may not produce a similar effect. If the practice *en commandite* were to prevail here, the management should be exclusively confined to the first class of partners, the loss of the protection of limited liability being in effect the penalty of interference in the transactions of the concern on the part of the *commanditaires*, who, save so far as their pecuniary contributions are in the eye of the French law mere cyphers. Such a system would in this country be wholly nugatory, for we much fear that it would be impossible to procure shareholders inclined to be so quiescent as to surrender all control. Partnerships *en commandite* have been long recognised by the laws of the United States of America, but we have the authority of Mr. BOLD that they have been but rarely adopted. Mr. FINEB, a leading member of the New York Bar, assigns as a reason that the commercial habits of our transatlantic brethren are of too active a character to transact business at second-hand, or to permit their trading relations to slumber in the torpor of dormant partnerships. We feel convinced that similar success would attend the legalised formation of such associations in this kingdom.

The opponents of the present bill fancy that they see dangers which may never arise, and their imaginations unquestionably magnify the objections which may, perhaps, to a certain extent exist. They argue that the principle of limited liability means this—That under certain circumstances a man shall not be liable to pay a certain class of debts; that although he shall be permitted to play for unlimited profits, yet if he loses that he shall only pay a limited loss. In support of their views, they rely upon the inconsistency of a man trading on one side of a street in his individual capacity, and being liable to pay his debts in full; and trading at the same time on the other side of the same street in his corporate capacity, without the same liability. The argument proceeds on a fallacy, for the two cases have no analogy whatever; and although State policy will not interfere legally to limit the liability of an individual, express contract may even now effect that object. There are certain undertakings of such extent and magnitude that isolated individuals can neither undertake nor accomplish them; State policy, therefore, recognises monied associations as indispensable, and accordingly affords to them legislative sanction. Is it, under such circumstances, just or politic to impose upon a single individual the obligation of paying all the liabilities of those who are associated with him? The law of partnership does, however, as it at present stands, permit the creditor of the many to victimise the one, and therefore the proposed amendment of the law very properly interposes, by stipulating that it shall henceforth be part of the preliminary contract that the creditor shall not possess such power. Every man dealing with a company to be formed under the present bill will be forewarned that he lends or sells alone upon the faith, credit, and funds of the association, and cannot afterwards complain of being precluded from vindictively crushing any individual member of it.

It is also insisted that parties have no means of ascertaining what may be the responsibilities of a company to be constituted under the proposed law; that all the present measure enables them to know is, that certain amounts were severally subscribed and paid when the company was started, and that they cannot possibly tell what contracts may have been subsequently made, what extent of liability may have been incurred, or what capital may have been expended. To check this alleged defect, the introduction of a clause has been proposed, prohibiting any company trading under the protection of limited liability, from incurring debts or making contracts beyond the amount of three-fourths of its registered capital. In the first place, we may ask what means does a creditor proposing to deal with an individual trader now possess of acquiring information on the several points above referred to, which will not be still open to him, even in a far greater degree, in respect of such a company? A number of persons associating together for the purpose of restricted trade, watchful of their individual interests for their own sakes, and publishing their proceedings for the sake of their shareholders, are not likely to be all in desperate circumstances, or to peril the protection which the law for limiting liability affords them, by any reckless transactions or palpable frauds. It may be, therefore, fairly assumed that persons dealing with such associations will have far more facilities for acquiring information respecting the affairs of such companies, than they can possibly possess or obtain in regard to the position of individual traders. We are not to assume that a number of men, having other avocations, and embarked in other branches of commercial enterprise, will associate together in order to render the law of limited liability a cloak for the perpetration of acts of sheer dishonesty; and it must be remembered that the present measure is not intended to shield, and will not have the effect of shielding, delinquents from the consequences of direct conspiracies to defraud, or of other criminal offences.

The antagonists of limited liability assert that those who have been most clamorous for the measure are not those who have money which they want to invest, but are rather persons looking out for capital which they require. We have always insisted that one of the strongest arguments in favour of limited liability was the protection it will afford to the capitalist in coming forward to assist the humble, the scientific, or the ingenious, who are in want of means to develop and display their abilities and their inventions. The advertising columns of our public journals are crowded with solicitations for parties to join in partnerships, and these advertisements would not be so frequent if they were not so frequently responded to. It was, during the recent parliamentary discussions, conceded that the intended measure was popular with the country gentlemen, many of whom were anxious to promote the interests of their younger sons, if they were assured that they could advance them in trade with comparative security. This object is contemplated by the proposed measure; we, therefore, meet the taunt of our opponents by confidently asserting that the intended bill must prove of inestimable value to capitalists of all classes, in enabling them to forward undertakings which were forbidden ground to them before; and we anticipate that this reform in the law will in its practical operation, successfully rebuke the prejudices and fallacies by which it has been opposed. We even go further, and venture to predict that the experiment will lead to the extension of the principle, and that the next session of Parliament will witness a considerable enlargement of the circle of its operation.

Even when the bill shall have received the final sanction of the Commons, it has to pass the ordeal of the House of Lords, and there we must be prepared to see it meet a powerful antagonist in Lord OVERSTON. It may be, therefore, premature as yet to speculate with certainty as to the exact shape it may assume when it becomes law. Should no material alteration be introduced, its probable effect upon companies for the promotion of mining enterprise is fitting matter for enquiry. It is, in the first place, observable that cost-book companies are not named, nor in any way affected by the present bill; and it may be, therefore, considered as framed wholly irrespective of them. There is, however, no difficulty in adapting its provisions and enactments to all existing cost-book mining companies that come within its purview as to the amount of subscribed and paid-up capital. To many of the smaller cost-book mining associations it will, of course, in its present form, prove wholly inapplicable; the greater number of those, particularly within the extended jurisdiction of the Stannaries, will, we conceive, continue to be worked as heretofore. When we remember that the Courts of Equity affect not to understand the Cost-book System, and have constantly declared its inapplicability to the extended commercial relations; and when we bear in mind that it has been found defective in practice, particularly with respect to defaulters, we are induced to anticipate that many of the leading mining companies, having metropolitan offices and directorates, will be remodelled on the provisions of the proposed bill. In its language it contemplates such a course, and it is declared to be expressly applicable to existing companies; and it is necessarily intended for those to be hereafter formed. The re-casting of the larger cost-book mining companies, so as to entitle them to the protection conferred by the proposed bill, will have the effect of conferring upon them all the powers at present possessed by other chartered and registered companies. They will be thus invested with unquestionable powers of suing and being sued in the name of a public officer, of enforcing payment of calls and forfeiture of shares, and will have what they can scarcely hitherto be said to have clearly possessed in the eye of the law—"a local habitation and a name." As all doubts as to their incorporated powers and privileges will be thus removed, and they will be invested by law with a legalised character, we are justified in confidently assuming that the present bill will operate most beneficially for the advancement of mining enterprise. Many timid men, unable to find any express parliamentary or judicial sanction of the Cost-book System, have dreaded mining companies established on that principle. This apprehension will

now cease, and mining companies can be in future defined and managed, under the protection of limited liability, with the same security and privileges as the joint-stock banking companies of the country.

Although mines in general have been fortunately relieved from rating to the support of the poor, at least for the present session of Parliament, every case bearing on the subject is necessarily of interest to those engaged in mining operations. At the present Quarter Sessions for Staffordshire, there was an appeal, on the part of Messrs. W. H. and J. W. SPARKS, against a poor's rate by the parish of Wolverhampton, made on the 27th of January, 1855, by which their colliery and lands at Stow Heath were rated in nett as follows:—Thirteen whimsy pits, at 40s. each; two gin pits, at 20s. each; 86a. 1r. 3p. of spoiled land, at 5s. per acre; and 26a. 2r. 24p. of land under cultivation, at 40s. per acre. The appellants insisted that they ought only to be rated for seven pits, containing 11a. 4p. of land, and that the cultivated land was also over-rated, there being now found to be only 20 acres, instead of 26. In support of the rate, a letter of the appellants was read, dated in December, 1854, in which they claimed to be rated for eight whimsy pits, at 40s. each, and four pillar pits; but it was alleged that they had refused to permit persons, acting on behalf of the overseers, to go down the pits for the purpose of ascertaining what the got had been, and that, in consequence, the respondents had been obliged to ascertain as well as they could the yield of the mine.

Evidence was then given, on the part of the respondents, to sustain the rate; and the principal question which then arose was as to the rating of pits which were not at work when the rating was made, but which had been previously drowned out. On the part of the appellants, it was now insisted that property ought to be assessed only with regard to its condition at the time the rate was granted; and that, when the assessment sought to be enforced was made, four of the pits were not productive, two being drowned out, and two having headings driven in them. Evidence was also adduced to sustain this and the other objections, and it was contended that coal pits could not legally be assessed which were out of working at the time the assessment was made, and that the authorities, upon the general principle of rating coal mines, established that there was no liability to rates on pits where there was no work actually going on. Using a pit for the purpose of some work to be subsequently done did not entail that liability; it was the produce of the pit which alone called forth the rating.

The CHAIRMAN observed, that the appellants had been rated for "coal mines," which were the words used in the Act, and the rating in the district had been agreed on at so much per pit. That was a mode of rating a colliery consisting of a great variety of pits, and the value was calculated from the number of pits. He did not say that this was a good or bad test; but then, if it was a bad principle, on a new rating a different principle must be adopted. In reply to the argument that an unproductive pit could not be rated, it was stated, on the part of the overseers, that if that rule were established, they would not in future accept any proposition of the coal proprietors for rating every pit at so much per annum, but that a new system of rating would be adopted in the next rate, by which the inhabitants of Wolverhampton would be benefited, and the coalmasters justly dealt with. It was conceded that the rate should be amended in respect of the land, and the quantity reduced.

The Court decided that the rate should be reduced to nine whimsy pits, two gin pits, 12a. 3r. 24p. of cultivated land, and 100a. 3r. 9p. of spoiled land, but they refused the costs of the appeal, not considering it a case for costs.

The ROYAL SANTIAGO MINING COMPANY having held their half-yearly meeting, on Wednesday (a report of which will be found in another column), and these mines holding out striking examples of the value and fluctuations of this description of property, and how an apparently failing adventure may be resuscitated by persevering enterprise, we proceed to give a short history of the undertaking. The company was originally formed in 1835 for working some valuable copper mines at Santiago de Cuba, near Cobre, in the Island of Cuba. The first proprietors were Mr. ISAAC LYON GOLDSMID (now Baron de GOLDSMID), Mr. WM. THOMPSON, M.P., Mr. ALEX. ROBERTSON, Mr. MICHAEL WILLIAMS, Mr. FLETCHER WILSON, and Mr. AUGUSTIN ARDOIN, of Paris. The undertaking was commenced with the determination to advance a limited amount of capital, with a view to work on a small scale, provided such could be done to advantage. They made an outlay of 35,000l. in sending out experienced workmen, to open the mines, in erecting dwelling houses, dressing sheds, and workshops, stores and materials, and in the purchase of cattle and other effects. They first concentrated their force on the mine called Descubierta, and the result, in a few months, was 383 tons of copper ore, sent to Swansea in two cargoes—one producing 20s. to 24 per cent., the other 21 to 30 per cent. for copper, which returned 11,490l.

Finding a larger capital necessary to develop the mines than they had contemplated, the proprietors determined to throw open the undertaking to the public, converting the 35,000l. into capital stock. They proposed to divide the company into 7000 shares, of 5s. each—the first amount to form part of such capital, payable by instalments of 5s. each, three months' notice to be given of each call. Mr. ROBERTSON still continued the managing director, and he sent out Mr. TREWEEK, the first superintendent under the company, who, with other experienced miners, considered the mines would prove very productive. In 1839, from the 1st Jan. to the 31st Aug., the ore raised amounted to 4946 tons, averaging for the year from 540 to 600 tons per month; and up to the end of the year there had been expended 43,210l., dividends having been commenced to be paid in 1840. In the year 1840, the ore raised amounted to 6316 tons; and in 1841, 8384 tons; in 1842, 11,528 tons; in 1843, 11,103 tons; and up to 1847, all went on well; and up to this time the quantity of ore shipped from the mine was 63,717 tons, the calls paid upon the shares were 10s. per share, and dividends paid amounted to 33s. per share to the proprietors, being 231,000l. in six years' dividends. A lawsuit commenced with the Cobre Company about the Sanctuary Ground, which was not settled till 1849, when the Santiago Company lost the mine. The company have been subsequently working their other pertenencias, from which the returns of ore have been from 600 to 1000 tons per annum, at a very great loss (in all about 60,000l.), which has, to a certain extent, been met by calls upon the shareholders.

In many cases when failures take place they are attributed to speculations in mining; we will not say that this is the rule, but our readers must be aware that in several instances this excuse is urged, and an indefinite loss is assigned to mining enterprise. We are perfectly aware that in many undertakings much capital has been wastefully expended, and the causes that have led to these deplorable results can, after failure has taken place, be easily traced.

The gold mining enterprises, both in California and Australia, have now become a matter of history. It is not our intention to enter into the formation or the subsequent career of many of these concoctions, the public are aware of their transactions, and to their unbiased judgment we will leave them: sufficient it is to say that the untoward events which have occurred may be fairly and properly assumed to have arisen from the fact, that in nearly every instance improper and incompetent individuals were appointed as superintendents. Many of these parties are now competent for the situations they are filling, but their experience has been obtained at the expense of the confiding public, who believed in their capabilities. Without any local knowledge, they went haphazard to work, and it was not until nearly the whole of the capital they were entrusted with was expended that they began to see the difficulties of their situation. Competent individuals could have been obtained, but we regret to say, the services of such are seldom or ever required. The generality of parties who project associations—company-mongers, as they are denominated—do not wish that to the scene of operations there should be dispatched men who are willing and able to tell the truth; they have no interest in the future prosperity of the undertaking; all they want is to have a man who will make a good report, so that the shares may go off well in the market. These people have no knowledge either of mines, mineralogy, or any of the sciences connected with them; their sole study has been to play upon the credulity and gullibility of their fellow-men; in this they are great adepts, and from time to time this is the reason why so many bubble companies are obtruded on public notice. The mischief, however, does not cease here, but really good properties are often damaged by the cupidity and ignorance of these unscrupulous adventurers. In England this may be somewhat difficult, as the mines here are mostly known to some competent person, who possibly, if a fraudulent scheme is concocted, may be able to warn the public. It is mostly in foreign mines that these jobbers dabble. The system of concoction is this—The party selected is generally

one who does not know the language, manners of the country, or the local difficulties likely to be encountered; a specific sum is fixed upon for his services, to this is added a per centage, provided he makes a favourable report; in order to save expenses his stay in the locality must be as short as possible; he takes a cursory glance at the property, hurries away as fast as he can, and brings home a report favourably couched, but based upon delusive estimates and false calculations; the scheme is then ushered before the public, the shares are sold, and the projectors retire from the field, having plundered their dupes of large sums of money; the concern is carried on to a loss, mining agents, unaccustomed to the locality, are sent out, and after a large sum of money is expended, the proprietors are told the mines are worthless, and there is no resource left but to wind-up.

In instances like the above, in our opinion, the promoters, so far as their means would reach, should be responsible to the shareholders, for not having in the first place sent out competent parties to inspect the property. We have all due respect to the intelligence and practical knowledge of our Cornish mining agents, and in their locality we have every reason to believe they have a perfect knowledge of the business they undertake, but we must protest against the doctrine put forward, that their decisions are infallible, as in several cases we know them to be fallacious. An instance we will cite—The Alten Mines commenced working in 1826; in the year 1835 a Cornish captain who had been there, on his return informed one of the then directors that there was not a cargo of ore in the mines, and advised him to sell his shares. How have this gentleman's prognostications been verified? we are now in 1855, the mines have been continuously working, and the produce for the month of May was 143 tons.

A company established for the working of mines in Sweden came to the resolution of winding-up a few days since. Without impugning the motives of any of the gentlemen connected with that undertaking, yet looking at the facts in their own report, that the manager had denounced it as worthless, and the mining captain had acknowledged he had been systematically deceiving them, would it not, as the Swedes, who formerly possessed it, had erected smelting-works, and arrived at practicable and profitable results, been advisable to have obtained some authority from either Sweden, Germany, or other places, who were not trammelled by the idea that all mining should be guided by the Cornish principle.

This particular association we have not singled out invidiously, nor do we know more of the merits of the case than appear in the directors' report. What we desire is, to see that mining should be carried out not as a speculation, but as an enterprise. Many adventures are brought before the public which, if properly conducted, would be highly remunerative to the shareholders, but owing to mismanagement and incompetence, become ruinous to all embarked in them. What we advise is, that none should invest his money in any scheme unless he saw the directors were men of standing, and the inspecting agents were in every way fully competent to the task they had undertaken. Above all, they should be careful of any project where a per centage was paid for a good report.

The committee of the shareholders of the ANGLO-CALIFORNIA GOLD MINING COMPANY, in conjunction with the directors, have just issued their report to the proprietors. By this, it appears that the liabilities of the company are 12,000l., to meet which there are assets to the amount of 9000l. In order to make the property available, it is necessary that a sum of 6000l. should be subscribed, which it is proposed shall be raised by the sale of preference shares of 10s. each, such shares to receive yearly, in perpetuity, out of the profits of the company, whenever a dividend is declared, a dividend of 25 per cent. upon the amount of each share, before any dividend be paid to any other shareholders; and that the preference shareholders, after receiving the above dividend of 25 per cent., shall take any remaining dividend in equal proportion with the other shareholders. The amount of the shares applied for to be paid within 14 days after application. The board have power to issue debentures, bearing interest at the rate of 25 per cent. per annum, to be redeemable by the company on giving six months' notice, and the company not to be required to pay off the same within 12 months; nor then, except upon receiving six months' previous notice in writing.

Such are the proposals which the directors, in conjunction with the committee of shareholders, have submitted to the proprietors. It cannot be concealed but that some of the shareholders have been displeased with the management of Sir HENRY HUNTLEY. This gentleman at present is merely a commissioner, and has no control over the mines or machinery, these being all under the guidance of Mr. FRANKHARD, who is a practical man. The question at issue now is, whether, after a sum of nearly 50,000l. has been expended upon the property, the shareholders will, by their culpable neglect, allow others to reap the benefit of that for which they have toiled. The committee state that the directors have afforded them every explanation in their power, and this, from the *bona fides* of these gentlemen, was anticipated.

The property is well known to be one of the first in California; untoward events have hitherto prevented its development, and it remains with the shareholders to see whether they will preserve it, or allow it to pass into the hands of the public. The committee have taken among themselves 1500 of the preference shares, thereby showing the confidence they have in the undertaking; and, if seconded as they should be by the shareholders, there is no question but that a favourable result will be arrived at. We have previously stated our opinion of the value of the property, so that it is not necessary again to refer to its capabilities. What we would impress on the shareholders is that, in the present emergency, they should support the directors who have so arduously toiled for them. Errors have been committed, but these have, in many instances, been the result of inexperience. The time has now arrived when a favourable solution may be obtained, with a little patience; and the last turn of the wheel of Fortune should not be thrown away.

IMPROVEMENTS IN REDUCING LEAD AND COPPER ORES.—It has long been an acknowledged fact that the processes which have been for so many years, and still are, adopted in the smelting of copper and lead ores possess many disadvantages, and are conducive to a very great loss in metal. Many have been the suggestions for improvement, but the large smelting-houses at Swansea, content to let large profits alone, have ever set their faces against what we suppose they considered an innovation. In the common reverberatory furnace much mischief frequently arises during the early part of the calcining process, and particularly with refractory ores, highly charged with sulphur, zinc, and antimony, from the overheating of the furnace, when a partial fusion of the ores of some metals takes place, which cannot be repaired, in most instances, but with great loss. Workmen not practically acquainted with furnace management often do much mischief, particularly in adding large quantities of quick lime, than which nothing can be more injurious. It absorbs an immense quantity of protoxide of lead, which cannot be reduced on the slag hearth, or by any other means, but with great loss. This mischief cannot well occur in the Patent Double Reverberatory Furnace, recently patented by Mr. Alfred Jenkins, formerly of Swansea, which we are about to describe, even with furnacemen of little experience, and the average loss of lead will be found not to exceed 5 per cent. with all ordinary ore. It consists of the ordinary fire-grate, the heated air and products of combustion passing into the flowing furnace, from which there are two passages leading into the calcining furnace: between these there are dampers, which can be closed when all the heat is required in the flowing furnace, and others opened, by which the gases are conducted underground to the chimney. When the heat is carried through the calcining furnace the central flue-dampers are closed, and two passages at the extremity conduct the gases to the main flue or chimney shaft. The ore to be calcined is fed through a hopper over the calcining furnace, the calcined ore removed through an aperture in the bed, and fed in a similar manner to the flowing furnace. An air or ventilating space is left between the two furnaces, in order to prevent the bed of the flowing furnace from becoming overheated. A small chimney at the end of the fire-bars serves to carry off any dust or ashes from the fire when fresh fuel is added, or when otherwise agitated; and the air-blast is supplied through apertures at the sides. Various advantages are derived from the use of this double reverberatory furnace. In the first place, the waste heat, after passing off from the flowing furnace, is economised, and employed for calcining the ore, instead of additional fuel being required for the purpose; while a slight portion of uncombined oxygen accompanies the waste heat from the flowing furnace, to act on the ore in the calcining furnace, rendering it more easily worked, however refractory. As two charges of ore, weighing from 48 to 60 cwt., are always being operated on at the same time—one in the first, the other in the second stage, and with one ordinary fire—an immense saving of fuel is the result. The patentee is erecting his first double furnace at Ark-Indale, near Richmond, Yorkshire, the company feeling convinced it was high time to do away with the old extravagant mode of smelting.

IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

(FROM OUR CORRESPONDENT IN CHESTERFIELD.)

JULY 12.—The greater part of the quarterly meetings of the ironmasters have been held, but the expectations of advance of the price of malleable iron do not appear likely to be realised, as there is not a sufficient degree of activity in the Staffordshire works to justify the step, although the make of bars has been reduced by about 1000 tons per week, by stoppages of some of the works. The demand in Yorkshire and Derbyshire continues to be steady, and the works are generally working full time. In plates, an advance has been realised of 1s. per ton, but in other descriptions of iron we do not hear of any advance beyond the prices of last quarter-day, sellers below that price having, however, adopted quarter-day's prices. The demand for Scotch pig-iron appears to continue unchecked, and has enabled makers and holders to obtain a very high figure for their iron. The reputation this iron has gained for foundry purposes brings it into universal use.

The Coal Trade is dull, without any alteration in prices. A new trade is said to have been introduced into Sheffield, the metropolitan of cutlery, by the casting of bells of cast-steel, which is reported to have all the advantages of bell-metal, with the recommendation of greater cheapness. Messrs. Naylor, Vickers, and Co., have presented one of these steel bells to St. Jude's, Church, Moorfields, Sheffield. It weighs about 1 ton, possesses great sweetness of tone, and is the first ever made of cast-steel in Sheffield, if not in all England.

A short time ago a small party from the Sheffield Mechanic's Institution set out on what they pleased to call "a mineralogical tour in Derbyshire," under the direction of their tutor, Mr. J. W. Slater, principal of the institution. According to a paragraph from their notes published in the Sheffield papers, they appear to have gone to the Over Haddon Gold and Silver Mine, and because they could not enter this private property, and do as they wished, they go to their homes like children disappointed of their "lollipops," and vent their rage, through the medium of the Sheffield press, by giving publicity to rumours which have no foundation in truth. If Mr. Slater, or his pupils, would favour the public with "such tests as could be applied on the spot," we should then have an opportunity of judging, and comparing them with the tests of gentlemen whose names stand high in the scientific world. Mr. Slater and his pupils would have been much better employed in the laboratory of the Sheffield Mechanic's Institution; and when they have done "schooling," no doubt the miners of Derbyshire, if they want any mineralogical tourists, will avail themselves of the services of the scientific gentlemen from Sheffield.

A peculiar crisis in the history of the Over Haddon Gold and Silver Mine has recently taken place, and in order to a clear comprehension of it, it may be well that by a recapitulation of past events its position be presented before the public. The mine is an adit or day level, driven for the purpose of cross-cutting or intersecting a lead vein, supposed to be at this time some 25 fms. in front of the end of the adit; the cost of reaching the same will probably be 1500l. The discovery of the gold mine has, by some ill-informed persons, been attributed to an under-keeper of the Duke of Devonshire, resident there; such, however, is not the fact. Certain parties, in company with the individual referred to, while digging the earth in pursuit of a rabbit, came upon what is not inaptly termed the pride, or indication of the wealth of the neighbouring lode. Certain masses of ore, in solid pieces, were found, weighing from 30 to 50 or 60 lbs., each containing about 80 per cent. of lead. According to mineral law, the discoverers claimed the advantage of their luck, and the bar-master, as in duty bound, set out their title and gave them possession. The mine was then apportioned out in shares, and the owners kept a portion for themselves; the remainder found their way into the hands of some of the most influential and respectable miners in the county, and also in the county of York. A committee was selected from this highly respectable proprietary, and contained the well-known names of the following gentlemen:—W. Condell, Chatsworth, medical adviser to his Grace the Duke of Devonshire; W. Jepson, Chatsworth; James Bray, the eminent railway contractor and civil engineer, Leeds; W. Rooth, director of the North Derbyshire Banking Company; Thomas Burgoyne, Eyam; and Thomas Broomhead, Calver; Mr. Heginbotham, acting as secretary, and Mr. Bentley, as agent to the company. Each of these individuals are conversant with the peculiarities of the toadstone formation, and the description of pyrites usually attendant thereon. But after having driven the level a considerable distance, the agent's attention was arrested by the discovery of a very profuse and remarkable quantity and quality of the pyrites, in connection more particularly with the toadstone, and which he at once handed to the committee, and thus it was the agent, and not the under-keeper, who made the discovery of that which in the estimation, as it will afterwards appear, of the leading scientific men of the age constituted the gold and silver mine. A committee meeting was called, and it was resolved that no expense should prevent them from ascertaining, on indisputable authority, the nature of the discovery. Their first step was to forward the material to leading provincial assayers in Sheffield and elsewhere, from whom they received very satisfactory certificates, and also from the exploded names—Berdan, Perkes, and others.

At this crisis an offer was made for the mine, in order to form a large gold company, but the proprietors' object was not to retire from it, neither was it their wish to hand it over to others who, by a flaming prospectus, on the authority of Berdan, would have appeared before the public. They did not wish to appear to possess what they had not, neither did they wish to sacrifice that which they had. At this juncture they had another claimant to the discovery, in the person of the Prime Minister, Lord Palmerston, the mine being on the property of Lady Palmerston. Her ladyship's agent served notices on the committee; and several Bakewellites, celebrated and profound in meddlesomeness rather than law, concurred entirely in the pretensions of her ladyship's agent and his advisers; and the consequence was, that on the discovery being made that her ladyship's rights extended no more to gold than they did to lead, and that the absolute and supreme right was vested in the Crown, or rather the Duchy of Lancaster, both parties, Lady Palmerston and the discoverers, appealed for preference, in order to become lessee, or worker, under royalty; but at this moment another branch of the protectors of the rights of the Crown disputed the right of the Duchy, and until this high struggle was settled, the adventurers were debarred from treating with either; but both at once declared that they could not allow of the adventurers being over-reached, that they should not treat with Lady Palmerston but in justice with the discoverers.

During this dispute in high quarters the committee thought the best thing they could do would be to have assays and calculations made by eminent and scientific men, who could have no interest in deceiving them; for be it remembered they were seeking the truth for themselves, not for a flaming prospectus, and, therefore, could only be interested in the facts. The gentlemen deputed to go to London and obtain reliable assays went to the editor of a leading scientific and extensively circulated journal, declaring their object and mission, that they were not come to get the material assayer to produce as high a per centage as possible, but rather under than over its deserts. The gentleman alluded to took his pen and gave a list of the most eminent scientific men in town, saying—"Such being your errand, you cannot do wrong in following that." This advice was followed, and has resulted in their having certificates of a satisfactory character, and in some instances the assayers journeyed from London, entered the mine, and got the material with their own hands. Those assays, from Professor Mitchell and many others, were very uniform in the amount of gold and silver found in the pyrites, and appeared to justify the committee in taking the final steps of bringing all these scientific tests to the further proof by the erection of machinery, in order to reduce the pyrites and amalgamate the gold.

Drew's machine, recently purchased in London, has arrived on the place, and the crisis referred to is simply as follows:—Although the owner of the soil is obliged to give up for the use of the mines as much land as is necessary for any purpose connected with lead mining without the slightest remuneration, having bought his property subject to these rights of the miner, and this right is so rigidly maintained in Derbyshire, that the bar-master, without consultation with the owner of the soil, sets out the amount of land required. The Over Haddon Company not having reached the lead vein, are not in want of dressing ground for their ore, but they are in immediate want of a space on which to erect their gold machinery, &c.; and, conceiving it only honourable to write and inform Lady or Lord Palmerston of their position, and requesting permission to erect the same, have done so, and from the same agent—retrospectively of Bakewell reminiscences—have received a reply declining to accede to their courteous request. Woe may court, for the level can and will be pushed, the vein in a few months will be intersected, and then that which courtesy would not give, mining rights will not then ask for; but, on the other

hand, if the Crown maintains its right to the precious metal, it will, doubtless, prove its right to conveniences for the dressing or amalgamation of the same. We approach the conclusion of these observations with few additional remarks. A great source of the prosperity of Derbyshire is the employment afforded by capital in search of lead ore; the greatest opponent to success is the channel, or toadstone, which cuts off the most powerful veins, and consequently puts a stop to further mining efforts; but the present struggle at Over Haddon is to determine whether the toadstone can be worked to a profitable issue by any scientific mode of operation. To say the least of it, this expensive and patriotic effort deserves countenance from all interested in the welfare of Derbyshire; and should it succeed, then that success converts an hitherto insuperable obstacle to lead mining into a friend, as to follow the toadstone in future would be profitable in the place of loss; but should the heart of the Prime Minister of England be fashioned after the mould of some others, and he refuse to allow them for a scientific experiment the use of a few square yards of the surface of a barren rock, then Britannia will choose again as she chooses right!

A recent discovery made at the Brightside Mine gives, per estimate, about 2 tons per fathom of lead ore. Since the 3d dividend we quoted some short time ago, a great number of debts that had not been brought forward have been paid off by the profits from ore, and a dividend is ready again for the shareholder.

The Peak United, which paid its dividend on Wednesday, is pretty certain to do so every three months; and as the miners who are driving the low level have cut the vein in the soles, or footing, bearing ore, and which in the course of a dozen fathoms will probably so rise as to become a good face, the profits from this level will be entirely additional, as the present dividends are derived principally from the day level, which has cut one of the three principal lodes of the Norcliff Sough Company, which crosses the Peak United sett.

THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

JULY 13.—If all the reports which reach me are to be credited, and I see no reason for doubt, we have, I think, arrived at a favourable turning point in the commercial and manufacturing affairs of this district. We have now got more than midway through the quarterly meetings, and with satisfactory results. The first, on Tuesday, at Walsall, as usual was nominal. On Wednesday, at Wolverhampton, although the attendance was not such as I have seen heretofore, still the meeting was well attended, and a much better tone prevailed, but business seemed to be put off until the meeting at this town yesterday, and a brisk gathering it certainly was. Owing to the intense heat, it was held in front of Dea's Royal Hotel, and amongst those present were the representatives of all the great houses, and a large number of buyers from London, Liverpool, Hull, and other places interested in the trade, who were prepared with more or less orders. By some it was expected that there would be a reduction in the prices of the preliminary meeting, and efforts were made at the commencement of the meeting to induce a change, but it soon became obvious that there was no necessity for it. There were sufficient orders, and of an imperative character, for both the home and foreign market to justify the maintenance of the quotations agreed upon at Stewpony, and order-sheets were given in at 87. per ton for bars, 91. 10s. for plates, and from 47. to 41. 5s. for pig. The latter article was reported scarce, and ironstone is rather advancing; it is expected that best white will go up from 16s. to 17s. 6d. Holders of stock are keeping back, in anticipation of an advance; and if the accounts received from America and other quarters are to be relied upon, there is evidently a good trade in store for us. All those present yesterday connected with the American trade concurred in representing the advice recently received from the United States as being most satisfactory. Nothing can excel their harvest prospects; stocks are as low as they can almost possibly be. The want of iron is increasing, and the means of purchasing likely to be abundant. From the home market the accounts are not unfavourable. Building is going on briskly in Yorkshire and Lancashire, and the demand for this purpose, in connection with the hourly requirements for Government, gives hopes of considerable activity during the ensuing quarter. Indeed, so strongly is this opinion participated in by capitalists, that a noble lord in the district is said to be preparing for the erection of new works, and the most active operations. So far, therefore, as reports and appearance go, we have everything to hope for. Add to the above the banking arrangements lately come to, and we may not unreasonably hope that the worst is over. With respect to the recent failures, there is scarcely a new fact in connection with them to be obtained. Meetings are continually being held, in various parts of the district, of the committees of enquiry, the attorneys, and others more immediately entrusted with carrying out the proposals which have been made; but, as it is with the unfortunate Eastern question, the more they negotiate upon many of the points the more complicated they become; and it is a growing notion with some of the creditors, whether a firm disposal of the available property, and payment of even a reduced dividend, would not be better for all parties than many meetings, bills of costs, and long periods of suspense. A little time, however, and the affairs must be wound-up in one way or another.

In the Coal Trade, considering the season of the year, the demand is large, and prices firm, ranging from 9s. to 13s. for best. It was expected that there would have been some trouble with the colliers in West Bromwich, but they are all at work, and no probability of any further uneasiness amongst them.

In the General Metal Trade prices are firm. Copper is reported rather scarce, although the demand for manufacturing purposes is not such as would cause any material decrease of the stocks; on the contrary, the hands at some of the large works are by no means well employed.

The Fancy Trades, including the Jewellery, are dull, particularly those branches which depend upon the consumption of the working classes. The enormously high price of provisions throughout the country generally prevents them from purchasing articles of luxury, and the Birmingham fancy trade consequently suffers in proportion to the inability on the part of the operatives to purchase. The deficiency, however, of the home market is to some extent being supplied by increased orders from abroad. During the past week, there have been some brisk foreign orders, particularly for South America and the Indies. Nor have our friends and allies, the Turks, forgotten us in their favours, having sent some good order-sheets for useful articles of general hardware. At the beginning of the war they ordered slowly, and with great caution; but they seem to be taking courage, and are now forwarding orders through such channels as will secure the execution of them.

Of the Gun Trade, the usual report is to be heard in all parts of the borough. It is more than brisk; it is overpowering in demand. A short time ago, an order arrived here for 100,000 guns of inferior quality—I do not mean in point of utility, but merely in finish, the object being to procure, in the least possible time, the greatest number of guns for immediate use. Whether they are intended for the Circassians, or others in that locality, whom we are about to arm, I know not; but the opinion is that they are not for the use of our own men. The briding branch of the trade is very bad, and many of the hands engaged in it have been set on to prepare the above order. The recent exposure of the failure of the Enfield guns has also contributed to animate the men and masters here, and stimulate them to still further efforts to uphold the credit of the town in the manufacture of fire-arms. The demand for shot and shells at the West Bromwich and Dudley Works continues, and the London Works are also contributing largely to the munitions of war.

Mr. John Huggins, of Birmingham, has during the past week specified, through Mr. George Shaw, his patent for a new or improved machine for the manufacture of lint. The calico or fabric to be made into lint is rolled upon a roller at one end of the machine; from this roller the fabric passes over a table, to the other end of the machine, where it is converted into lint. The fabric, when uncoiled from the first-mentioned roller, is guided in its passage over the table by a transverse bar, furnished with points or pins. A slide fixed to the underside of the bar slides with friction in a groove in the table; by these means a considerable amount of tension is given to the fabric as it passes through the machine. Besides producing the necessary amount of tension in the fabric, the before-mentioned transverse bar has for its object to preserve the transverse threads of the fabric as nearly as possible at right angles to its motion. The fabric, after passing over the transverse bar, passes under a guide roller, and then over a feeding-roller, studded with points or pins, which enter the fabric as it passes over them. After passing over the feeding roller, the fabric hangs vertically between a fixed horizontal bar and a moveable knife or cutter, hereinafter explained. The fabric, as it passes over the feeding-roller, has a rapid alternating motion given to it, at the same time that it is made

slowly to pass through the machine. The moveable knife, or cutter, is made of a horizontal strip of metal, the edge of which is bevelled, and is fixed upon a moveable frame, which has motion given to it in a horizontal plane, by means of a cam, situated on the driving-shaft of the machine. By the motion of the knife, the fabric between it and the fixed bar is alternately pressed between them, and liberated from the compression, so that as the fabric rises it is scraped against the edge of the knife. As the fabric descends it is liberated from the knife and bar, and it falls freely. By the motion of the moveable knife the fabric is again compressed between it and the fixed bar, and by the rising of the fabric it is again scraped by the knife. By the means described, the fabric is subjected to repeated scrapings of the knife, and is thereby converted into lint, at the same time that it is passing slowly through the machine.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

JULY 12.—The quotations for both stock and shares show but little variation during the past week, and business was somewhat more limited than in the preceding one, dealings being confined to the leading companies as means for investment. Scarcely any transactions have taken place for the account in shares, which shows the small amount of speculative business now dealt in. Consols closed, to-day, at 91, both for money and account, and New Three per Cents. at 91½. Mining Company shares were done at 14, or an advance of ½, while those of the General Mining Company were 2½, being ½ depression. Wicklow Copper shares were done during the week at 28, and Lackanore at 5s. 6d. Although there is but little doubt that the Great Southern and Western Railway Company will pay the next dividend at the rate of 5 per cent., as I anticipated, the shares were a little weaker to-day, having been done at 50½. Midland Great Western shares marked 50½ to-day, and Waterford and Limerick shares 20½.

The meeting of the Wicklow Copper Mining Company came off to-day, and the statement presented was highly satisfactory. The accounts showed a profit on the half-year's working of 25000l., but the directors did not deem it expedient to pay a dividend. The report of the agent, Mr. Barnes, was read, giving in detail the state of the mine at the several levels, and showing that the state of the company's property was never, since the commencement of the undertaking, in a more satisfactory condition, that the machinery, &c., was in most perfect order, and that tanks have been constructed, by which means the mine can be completely unwatered; that it is expected the lode which they have been for some time seeking will be met with in about six or seven months, when an accurate estimate can be formed of its value; that there is no possible diminution of barytes, as it is calculated that there are at present about 200,000 tons of it at the mine, independent of ground as yet unopened. The report also showed that there has been an increase of 500 tons of copper ore over the previous half-year, and there is no doubt but that this increase will be fully maintained. The directors, in their report, mainly attribute the decreased profits to the immense importation of brimstone which has taken place, owing to the low freights charged on this article coming by vessels in the public service returning from the Black Sea. As it appears, by a governmental return, that the importations of brimstone were 38,000 tons in 1852, 46,000 tons in 1853, and 76,000 tons in 1854; and as in the chemical manufacture 1 ton of brimstone is equal to about 3 tons of barytes, it follows that in the latter year a supply equal to about 90,000 tons of barytes was thrown upon the market. The report shows that 2000 tons of iron ore were for the first time shipped this half-year, and realised sufficient to pay all the expenses of production. In conclusion, the directors showed that the undertaking must ultimately be eminently successful; that the demand for barytes had increased during the last month, and most probably that the copper lode would soon be intersected; and assured the proprietors that they had the greatest confidence in their prospects, and had no doubt whatever of the ultimate success which would attend the workings; the present diminished profits resulting from the general depression of trade caused by the war, but which could only be of a temporary nature.

Although the Rating of Mines Bill has been for the present withdrawn, the subject still retains its interest, and the time from this till the next session of Parliament will be fittingly employed in organising such an opposition to the bill as will prevent its adoption. Since the introduction of the Poor Law system, Irish mines were taxed with rate; and what we want is, to be placed on an equal footing with other parts of the kingdom, and not to be subject to exclusive legislation. Our able Solicitor-General, before his connection with Government, was seeking for equal privileges with England in this respect, and it must be admitted that it would only be acting in the spirit of fair play, while Ireland is only recovering from past neglect, not only to place her on an equality with England, but to afford her every aid that might be required to rouse her from the lethargy and indifference of ages.

If rating for the support of the poor be intended, as it evidently is, to relieve the destitute, would it not be better, instead of burthening the country with taxes, to lay the axe to the root at once, and to lessen pauperism by giving increased employment? And how can this be better effected than by holding out an encouraging hand to every work of an industrial nature; and to foster the rising energies of the country by wiping off every impost that might tend to check her enterprise, or to clog her industrial advancement? I am aware that in Cornwall mines, other than coal mines, are, except in the case of a fixed rent, charged with rate according to local arrangements on the dues, after deduction of a moiety—a third, or a tenth, as the case may be—for expenses, &c. Some arrangement of this kind would be even acceptable for the present, till the matter is brought before Parliament; and I trust the Poor Law Commissioners will take the matter up, and adopt some uniform plan other than the uncertain one at present in operation. When our present Viceroy was Chief Secretary for Ireland this matter was brought under his consideration, and he defined clearly that the rate, when chargeable, would be levied on the dues, but it has not been so acted upon since.

Great credit is due to the Mining Company of Ireland for having taken the initiative in this matter, as I believe they did. And when it is known that they give employment to several thousand of both sexes, it will be easily seen that this is a matter in which they are deeply interested, and which, consequently, they must desire to see settled as soon as possible.

An injunction was granted, on Tuesday, by the Master of the Rolls, to restrain a person named Crammire from proceeding with an action of ejectment against the Belfast and Ballymena Railway Company. The company lodged 329l. 15s. 8d., being the award of Mr. R. Clarke, who was arbitrator. The action was brought by Crammire upon some technical point, which was overruled. There was another case of a similar nature, which was also gained by the company.

MINING TRICKS IN CORNWALL.—At the Helston County Court, on Monday (G. G. Kekewich, Esq., presiding), Mr. T. P. Tyacke applied for leave to issue a summons against Mr. William J. Birch, of Oxfordshire, the principal shareholder in the Porellis United Mines, in Wendron, for 42l., alleged to be due to Capt. Bryant, as an agent of the mine, for salary. Mr. Frederick Hill objected to the motion: he said he was aware of the circumstances under which Capt. Bryant was placed at the mine by Mr. Tyacke, against the wish of Mr. Birch and other shareholders. Mr. Birch had expended considerable sums in Cornwall in mining speculations, and he believed he always paid every fair and honest claim. Mr. Tyacke contended that Mr. Hill had no right to interfere against him; he was not retained to do so. Mr. Hill replied that he had volunteered his services, for he considered it was an unjust attack on a gentleman residing so far from Cornwall. Capt. Bryant was engaged for private purposes, and he should look to the parties by whom he was employed. His Honour questioned Capt. Bryant, who said he received his appointment in writing from Mr. Tyacke and two other gentlemen, and admitted he did not know Mr. Birch in the matter. His Honour refused the application.

The Tennessee (U.S.) Copper Mines have sold at Liverpool, since March, about 2000 tons of ore. The lowest price obtained was 20l. 12s. 6d., and the highest 37l. 10s. per ton. The accounts received by the last steamer are of the most flattering character. The Isabella, Tennessee, Polk County, and the Mary's Mines, continue to get away monthly, with the present limited means of transportation, about 500 tons. The general superintendent of the mines writes, under date of June 16:—"Our mines are all doing well, yielding monthly about 500 tons of high grade ores. We have had, during the past month, a good deal of the yellow sulphate of copper at the Tennessee, Polk County, and Mary's Mines." These ores continue to be in great demand among the smelters in England, and we understand that they bring the highest prices of any ores sent to this market.

PROPOSED RAILWAY COMMUNICATION BETWEEN ENGLAND AND FRANCE.

Many years have elapsed since I first addressed the public, through your Journal, on telegraphic and railway communication with France. The former of these has been satisfactorily accomplished, but the latter yet remains to be provided for.

I formerly suggested that a tunnel should be excavated right through from Dover to Calais, underneath the bed of the Channel, to serve both for railway and telegraphic communication, each end to be approached by an inclined plane, and the tunnel to be higher in the middle of the channel than at the ends, so that any water which might ooze through the masonry of the tunnel would flow to the extremities, and from thence be raised by steam-power to the surface of the earth, and deposited in the English Channel. I proposed that the depth of the tunnel should be from 20 to 30 fathoms lower than the deepest soundings in the channel, in order that it might be accomplished with less danger from water. I considered that the risk and difficulties which were encountered in the formation of the Thames Tunnel were much greater than would be attendant on this, on account of the former being placed so near the bed of the river, with no very great thickness of earth intervening; whereas, any one at all conversant with the drifts in coal-mines in this northern district, would at once see the practicability of my plan; and I believed no greater danger would be apprehended in the formation of it, if so much, as there was in some of our deep and extensive coal mines, &c.

M. Hector Horeau, C.E., came forward a year or two ago with a plan of a submarine railway, to be encased in a strong iron tube, at a cost of 87,400,000l.; whereas my scheme of tunnelling would not amount to one-tenth of this expense, and, when once completed, would remain for ages a useful memorial of engineering and persevering labour. Since I published my former letter, I have been favoured with the opinion of many practical engineers of high standing, and scientific gentlemen, who all agree as to the practicability and superiority of my plan; and it now remains for me to show the kind of strata which is likely to be met with in excavating the tunnel. It is an ascertained fact, that the opposite coasts of England and France are composed of chalk, and present ranges of white cliffs facing each other, which has led geologists and others to conclude that they must have been united at one period. But the outer crust of our globe having gone through many changes in the course of ages, some parts being raised from the bottom of the ocean by some powerful internal action, and the same again being submerged—during some of these wonderful changes, wrought by an Omnipotent power, the waves and currents of the ocean have scooped out a passage through the Straits of Dover, washing away the chalk and looser formations, and depositing of Portland stone and Kimmeridge clay. This demonstrates at once the kind of strata likely to be met with at even less depth than I formerly proposed, but which could be accurately ascertained by borings at equal distances along the intended line; and then I have no doubt a depth under the sea of 10 or 15 fathoms might be found sufficient to answer all practical purposes, thereby lessening the inclines at each end very considerably.

Instead of lining the tunnel with masonry, I would now suggest that prepared iron of a proper strength should be used, making it a tubular rail communication. The advantages to be derived from using iron instead of stone, would be the entire exclusion of water, and the tunnel could be made on a level from shore to shore. With an effective body of miners from the coal works in this country, and by the aid of horizontal boring machines for the blasting of rocks, &c., it might be accomplished at less expense, and in far less time, than anticipated; for of late years no science has made such rapid improvements as civil engineering, and what was deemed impossible a very few years ago is now accomplished with the greatest ease. Since the application of steam as a motive-power, combined with the improvements in machinery for accomplishing works impossible to the efforts of man, a new era has arisen, which is only in its infancy; for with the progress of civilisation we shall go on making useful discoveries in the inexhaustible fields of science, and those who come after us will still be able to make further improvements upon our discoveries and inventions.

A communication across the Isthmus of Panama, between the Atlantic and the Pacific Oceans, was a difficulty which attracted the attention of engineers for many years, and which was lately accomplished by a railway, at a far less expense than ever was anticipated; and we may now confidently hope that something of the kind will shortly be established between England and France. With the sanction and assistance of the two Governments, and under the management of an energetic and enterprising company, a sufficient capital might soon be raised for the completion of the undertaking; and it would form a close connecting link between the two greatest and most enterprising nations in the world, uniting their interests together in a commercial point of view, from which great advantages would be derived, and at the same time affording a safe and an expeditious means of international communication, and tending to cement in close and everlasting bonds of friendship the inhabitants of both countries.

Gilesgate, Durham, July 11.

JOHN NICOL.

ONE HUNDRED MILES PER HOUR!—NEW IRON ROADWAY FOR HIGH SPEEDS ON RAILWAYS.—The statistics of railways abundantly prove the urgent need of more substantial, safe, and efficient permanent ways than those hitherto in use, adequate to the increase of weight, speed, and power in the locomotives. Engines that were formerly 12 tons in weight, and working at a steam pressure of 45 lbs. on the square inch, now weigh 40 tons, and work at 120 lbs. pressure; and the rate of speed, formerly 25 miles per hour, is now 60 miles; while railways that formerly ran 60 trains per day, now run 300, with a proportionate increase in the weight of goods and passenger trains. Notwithstanding this enormous increase in speed, power, weight, and number of trains, no corresponding improvement in roadways, to render them capable of sustaining the necessary wear and tear, has yet been effected; and seeing the mischievous effects of this desideratum in our railway economy, Mr. Thomas Wright, C.E., has designed a bedplate, sleeper, and iron roadway, expressly adapted for sustaining the highest speeds and heaviest traffic, with the greatest durability and lowest cost for maintenance, combining the advantages of the longitudinal and transverse systems, and upon which 100 miles per hour may be performed with perfect ease and safety. The most distinguishing feature of this invention is the employment of a single sleeper as a complete piece of roadway in itself, consisting of a massive piece or casting, capable of sustaining a pair of rails, being without longitudinal or transverse joints, similarly constructed to the bed of a slide-lathe or planing-machine, and steam-engine solid iron bedplate, which, when combined continuously with others of a similar construction, forms the iron way of the railroad, and is a complete system of independent iron framing. The rails are secured by a vice-jaw fastening to these sleepers (which are incapable of movement among themselves), forming at once a solid mechanical structure, smooth, stable, and unyielding, and calculated to permit the full development of the improvement in locomotives, and the onward progress of railway transit, with efficiency, safety, and economy.

TAILORSON'S IMPROVEMENTS IN SHIPBUILDING.—It is not too much to say that the improvement in iron shipbuilding, under the system patented by Mr. Taylerson, is one of the most practical and useful results of scientific application to which public notice could be directed. The disasters to iron-built vessels which occurred during the last 12 months impress the mind with the conviction that an improved mode of construction is absolutely required. The rapid foundering and "breaking-up," which so fatally characterised the loss of this class of shipping, it cannot be denied arose from a weakness of construction, a want of thorough superstructure, and the absence of a sound base for those great and ponderous superstructures which, as they were first launched forth, seemed calculated to brave the violence and fury of the elements at their worst. But how easily have judgments erred, and hopes been disappointed. Life and property, to an enormous amount, have fallen a sacrifice; and to what? To a stolid adherence to antiquated rules, and to the disinclination of the building-yard savans to disturb capital in its ordinary routine expenditure, for the sake of improvement. It is truly to be deplored that, in nine cases out of ten, greatness springing from the utility of invention has to be forced upon us. Old prejudices array themselves against truth; and not until facts, stark and stern in reality, oppose them, do they disperse and dissipate, and give place to the active principles of science and intelligence. The diagonal system of constructing the hulls of iron ships patented by Mr. Taylerson is, we are informed, about being adopted on a large scale on the Continent; and although several English builders have given it their approbation, and have introduced it into their works, still it is not improbable the *esprit de science* of our neighbours on the other side of the Channel will foster this improvement in iron shipbuilding to success and general utility.

THE COPPER TRADE—ANNUAL STATISTICS:

FROM JUNE 30, 1854, TO JUNE 30, 1855.

Containing the quantity of Copper Ore sold from each Mine, British and Foreign.—Average Price per 21 cwt., and the Amount of Money.—The Average Standard, Produce, and Price for the Year, both in Cornwall and Wales.—The Total Amount of Ore, Fine Copper, and Money.—Each Company's Purchase.—And the Particulars of Copper Ores sold at the Ticketings in Cornwall, from June 30, 1854, to June 30, 1855, both inclusive.

CORNWALL.			
Mines.	Ore (21 cwt.)	Price.	Amount.
Alfred Consols	3045	£9 0 6	£27,405 10 6
Artar, Wheal	2761	£12 0 0	£33,132 0 0
Basset, Wheal	3018	£8 0 0	£24,144 0 0
Bedford United Mines	2168	£7 8 0	£16,910 4 0
Bedmin United Mines	400	£6 1 6	£2,464 0 0
Bolling Well	734	£6 9 0	£5,068 6 0
Buller, Wheal	1200	£15 0 0	£18,000 0 0
Buller, Wheal	11142	£15 0 0	£167,130 0 0
Callington Kelly Bray	183	£4 9 0	£7,083 0 0
Cambridge Consols	580	£4 19 0	£2,472 0 0
Cambridge Vein	174	£4 12 0	£718 4 0
Carn Bros Mines	5720	£16 0 0	£91,520 0 0
Carpenter, Wheal, East	265	£9 19 6	£2,443 14 6
Carpenter, Wheal, West	525	£3 2 6	£1,681 0 0
Carvannal	462	£7 17 0	£3,194 4 0
Charlotte, Wheal	806	£8 1 0	£6,448 0 0
Clifford, Wheal	1081	£9 1 0	£9,849 0 0
Clifford and Westworth	427	£5 16 0	£2,123 2 0
Comfort, Wheal	1253	£2 5 0	£2,633 0 0
Condurow	1414	£7 1 6	£10,058 4 0
Consols	2788	£4 16 6	£12,173 12 0
Cook's Kitchen	277	£2 1 0	£567 0 0
Crobar, Wheal	457	£5 0 0	£2,285 0 0
Creechbrow	1111	£4 18 6	£4,549 16 0
Devon and Cornwall United	140	£3 19 0	£514 0 0
Devon and Courtenay	194	£8 13 6	£1,619 14 0
Devon Great Consols	21821	£5 18 6	£125,433 12 0
Dolcoath	705	£4 0 0	£2,821 0 0
East Crowdale	153	£6 10 0	£925 0 0
East Pool	2089	£5 11 0	£11,589 4 0
Fowey Consols	4518	£7 10 0	£31,668 0 0
France, Wheal	691	£2 19 0	£1,333 0 0
Friendship, Wheal	1534	£9 4 6	£14,184 0 0
Gambler and St. Aubyn	102	£8 1 0	£820 0 0
Great Wheal Alfred	1827	£4 16 6	£8,004 7 0
Great Crinnis	427	£5 16 0	£2,123 2 0
Great Onslow Consols	238	£3 8 6	£914 15 0
Great Wheal Sheba	990	£2 12 0	£2,376 0 0
Great South Tolgus	400	£6 0 0	£2,400 0 0
Guskus	304	£3 15 0	£1,142 0 0
Halarnmor	2533	£5 18 6	£13,000 18 0
Hawkmor	414	£6 10 0	£2,484 0 0
Helen, Wheal	108	£6 15 6	£703 2 0
Hingston Down	2926	£7 1 6	£20,670 12 0
Holmehush	1780	£5 4 0	£9,720 0 0
Levant	1385	£5 4 0	£7,175 13 0
Marke Valley	2335	£3 18 6	£7,025 0 0
Mary Great Consols	314	£4 19 6	£1,264 2 0
Messers, Wheal	518	£3 19 6	£1,903 0 0
North Basset	3601	£9 12 0	£32,412 0 0
North Wheal Busy	106	£7 12 0	£768 0 0
North Croft	1314	£8 7 0	£11,422 0 0
North Downs	418	£7 7 0	£3,081 0 0
North Pool	417	£5 17 0	£2,309 0 0
North Wheal Robert	452	£6 18 0	£2,736 0 0
North Wheal Sheba	2102	£7 15 0	£15,772 0 0
Par Consols	4321	£10 3 0	£44,860 0 0
Paul's Downs	179	£5 8 6	£972 15 0
Pembroke and East Crinnis	1809	£5 13 0	£10,229 0 0
Pendarves and St. Aubyn	104	£9 7 6	£973 16 0
Perran St. George	2915	£1 18 0	£5,247 0 0
Perran and Great Wh. Leisure	2449	£2 15 0	£6,735 0 0
United Mines	3133	£7 6 0	£23,913 0 0
Phonix Mines	100	£3 12 0	£360 0 0
Priddy Wood	244	£4 3 6	£1,047 0 0
Providence Mines	235	£5 16 0	£1,216 0 0
Richards' Wheal Friendship	1594	£8 3 6	£13,207 0 0
Rosewarne United Mines	520	£5 6 0	£2,912 0 0
Russell, Wheal	4380	£5 1 6	£22,196 0 0
Seaton, Wheal	687	£9 15 6	£6,173 0 0
Sortridge Consols	232	£4 4 0	£1,028 0 0
South Croft	3375	£12 5 6	£41,484 0 0
South Crever	1674	£3 19 6	£5,068 6 0
South Crinnis	2341	£8 14 0	£19,283 0 0
South Tolgus	824	£4 8 0	£3,352 0 0
St. Day United Mines	3372	£9 8 0	£31,719 0 0
St. Day United Mines	1110	£9 18 0	£10,098 0 0
Sundry small mines	2642	£5 18 0	£13,332 0 0
Tary Consols	3275	£5 18 0	£16,443 0 0
Tinroft	222	£5 7 0	£1,273 0 0
Trebarrah, Wheal	4617	£3 5 6	£15,133 0 0
Treleigh Consols	197	£8 5 6	£1,683 0 0
Treloven	148	£3 4 6	£512 0 0
Trenow Consols	330	£5 12 0	£1,665 0 0
Trenow Consols	205	£7 16 0	£1,496 0 0
Trenow Consols	3502	£3 12 0	£12,611 0 0
Trethell	862	£2 13 6	£2,107 0 0
Trevelick	598	£4 4 0	£2,632 0 0
Trevelick	161	£5 19 6	£851 0 0
Tywarth	10751	£5 6 0	£57,022 0 0
West Wheal Alfred	115	£3 0 0	£345 0 0
West Alfred Consols	903	£3 14 6	£3,057 0 0
West Basset	6899	£7 2 0	£48,843 0 0
West Crinnis	188	£6 11 0	£1,129 0 0
West Caradon	4132	£8 14 0	£33,588 0 0
West Darnell	1815	£6 6 0	£10,877 0 0
West Fowey Consols	208	£9 17 0	£1,884 0 0
West Polbarro	178	£4 4 0	£784 0 0
West Providence	213	£9 8 0	£1,902 0 0
West Seton	2319	£6 8 0	£18,017 0 0
West Stray Park	123	£7 15 6	£900 0 0
West Treasury	296	£6 2 6	£1,811 0 0
Uly, Wheal	204	£7 1 0	£1,438 0 0
Zion, Wheal	136	£5 12 0	£712 0 0

WALES.			
Mines.	Ore (21 cwt.)	Price.	Amount.
Arnan	232	£2 4 6	£513 15 0
African	797	£34 10 0	£27,324 0 0
Algeria	248	£10 17 6	£2,696 0 0
Blymorth	1647	£10 0 0	£16,470 0 0
Boreham	5063	£10 12 0	£51,733 0 0
British Slag	406	£3 7 6	£1,509 0 0
Chili	382	£3 7 6	£1,438 0 0
Cobre	1572	£18 6 0	£28,858 0 0
Copapo	742	£19 13 6	£14,404 0 0
Cuba	3125	£15 7 6	£48,071 0 0
French Slag	694	£3 16 6	£2,654 0 0
German	398	£2 11 0	£836 0 0
Holyford	497	£19 10 0	£9,492 0 0
Kapunda	918	£24 10 0	£22,501 0 0
Knoekmahon	4443	£11 6 0	£49,153 0 0
Namaguar	32	£12 0 0	£384 0 0
Peninsular	1104	£7 14 0	£7,868 0 0
Santiago	773	£18 11 0	£13,934 0 0
Spanish	785	£9 12 6	£7,055 0 0
Sundry small mines	1675	£9 15 0	£15,335 0 0

Particulars of Copper Ores sold in Cornwall, from June 30, 1854, to June 30, 1855.

Copper ores	188,969 t. 0 c.	Average produce	6%
Fine copper	12,241 t. 18 c.	Average standard	£141 10 0
Amount of money	£1,212,686 8s.	Average price	6 8 6

Particulars of Copper Ores sold in Wales, from June 30, 1854, to June 30, 1855.

Copper ores	30,415 t. 0 c.	Average produce	13% 1-16
Fine copper	5,251 t. 9 c.	Average standard	£126 2 0
Amount of money	£573,507 4s.	Average price	14 11 0

Totals in Cornwall and Wales.

Copper ores	228,387 t. 0 c.	Fine copper	17,493 t. 7 c.
Amount of money	£1,786,193 12s.		

Copper Ores purchased by the Copper Companies, from June 30, 1854, to June 30, 1855.

Purchasers.	Ore (21 cwt.)	Copper.	Money.
Mines Royal Copper Company	11,133	347 t. 6 c.	£ 87,181 19 2
Vivian and Sons	28,672	2382 t. 9 c.	£ 255,654 8 3
Freeman and Copper Company	19,239	1311 t. 16 c.	£ 131,943 10 1
P. Grenfell and Sons	30,413	2147 t. 9 c.	£ 218,383 14 1
Sims, Williams, Nevill, and Co.	23,507	1746 t. 5 c.	£ 176,284 10 0
Williams and Co. and Crown Co.	47,195	4007 t. 12 c.	£ 412,914 10 0
English and Australian Copper Co.	14,306	1108 t. 7 c.	£ 113,897 2 3
Mason and Elkington	18,285	1434 t. 17 c.	£ 148,089 2 8
P. Bankart	10,032	829 t. 14 c.	£ 86,813 14 5
Copper Miners' Company	15,195	1124 t. 2 c.	£ 114,286 11 0
British and Foreign Copper Company	407	113 t. 0 c.	£ 12,773 12 2

Copper Ores sold at the Ticketings in Cornwall, from June 30, 1854, to June 30, 1855.

Date.	Ore (21 cwt.)	Money.	Produce.	Standard.
1854	140,981	£997,751 8 0	8% 1	£115 12 0
1855	140,763	£986,613 15 0	7% 1	£119 5 0
1856	140,688	£857,779 11 0	7% 1	£109 3 0
1857	140,561	£852,297 13 0	7% 1	£110 2 0
1858	140,434	£846,815 15 0	7% 1	£108 10 0
1859	140,307	£841,333 17 0	7% 1	£107 8 0
1860	140,180	£835,851 19 0	7% 1	£106 6 0
1861	140,053	£830,369 21 0	7% 1	£105 4 0
1862	139,926	£824,887 23 0	7% 1	£104 2 0
1863	139,800	£819,405 25 0	7% 1	£103 0 0

Date.	Ore (21 cwt.)	Money.	Produce.	Standard.
1844	135,667	£815,246 9 6	7% 1	£109 17 0
1845	135,540	£810,764 11 6	7% 1	£108 10 0
1846	135,413	£806,282 13 6	7% 1	£107 8 0
1847	135,286	£801,800 15 6	7% 1	£106 6 0
1848	135,159	£797,318 17 6	7% 1	£105 4 0
1849	135,032	£792,836 19 6	7% 1	£104 2 0
1850	134,905	£788,354 21 6	7% 1	£103 0 0
1851	134,778	£783,872 23 6	7% 1	£101 0 0
1852	134,651	£779,390 25 6	7% 1	£100 0 0
1853	134,524	£774,908 27 6	7% 1	£98 0 0
1854	134,397	£770,426 29 6	7% 1	£96 0 0
1855	134,270	£765,944 31 6	7% 1	£94 0 0

—Grylls's Annual Mining Sheet.

THE COAL TRADE.

The following is a statement of the delivery of coals, &c., in the port of London during the month of June:—

ships.	Tons.	ships.	Tons.		
Newcastle	304	93,612	Blyth	8	1,496
Sunderland	167	49,609	Scotch	15	2,057
Seaham	119	28,299	Welsh	63	17,767
Hartlepool & West Hart.	154	42,490	Yorkshire, &c.	43	3,053
Stockton and Middlesbro'	3	453	Small coal and cinders...	5	603

Total 881 238,410

Total imported in June, 1854—coal, culm, and cinders 275,602

Comparative Statement of 1854 and 1855.

Imported from 1st January to 30th June, 1854 1,663,510 tons

Imported from 1st January to 30th June, 1855 1,468,932 "

Decrease of ships and tons 707 194,578

Inland coals by railway, canal, and common roads, entered at the coal-marks during the month of June, 1855 86,780 1/2

THE RAILWAY COAL TRADE.

Monthly statement of coal and coke brought by railway and canal within the London district, during the month of June:—

Railways.	Tons cwt.	Railways.	Tons cwt.
Great Northern	45,927 10	Great Western	10,109 0
North-Western	16,783 8	South-Eastern	1,322 8
Eastern Counties	10,133 18		
Total by railway in June, 1855	84,290 4		
Coals by railway in June, 1854	62,063 19		
Coals by canal in June, 1854	1,584 10		

Comparative Statement of 1854 and 1855.

Coals by railway from 1st January to 30th June, 1855 494,642 9

Coals by railway from 1st January to 30th June, 1854 432,161 5

Increase in the year 1855—railways 62,481 4

Coals by canals from 1st January to 30th June, 1854 14,945 19

Coals by canals from 1st January to 30th June, 1855 10,575 18

Decrease in the year 1855—canals 4,370 1

THE COAL TRADE.—The following is an account of the coal shipped in 1854 from the principal coal ports:—

Ports.	Tons	Coastwise.	Foreign.	Total.
Newcastle	2,148,076	1,410,521	3,567,597	
Sunderland	2,068,445	505,448	2,573,893	
Hartlepool	1,268,583	409,780	1,678,363	
Cardiff	481,333	365,948	1,047,281	
Newport	598,435	134,555	732,990	
Liverpool	123,871	317,222	441,093	
Shields	225,700	194,203	419,903	
Swansea	255,894	98,419	354,313	
Maryport	304,197	3,184	307,381	</

FOR SALE, a very excellent **WATER-WHEEL**, 40 ft. diam., 4 ft. wide, with cast-iron rings, cast-iron cylindrical axle, with grideen gear turned and fitted with rollers and gunmetal bearings; the whole nearly new, and of the best material and workmanship.—Applications to be made to Messrs. NICHOLLS, WILLIAMS, and Co., engineers, Bedford Ironworks, Tavistock.

NICHOLLS, WILLIAMS, and Co., have a **QUANTITY OF SECOND-HAND MILL MATERIALS FOR SALE.**

FOR SALE TO ENGINEERS, SHIPBUILDERS, RAILWAY COMPANIES, AND OTHERS.—ONE very powerful BRAKE SLIDE LATHE, double geared headstock, 16 in. to centre, bed 18 ft. long, with gear, which is opened by a screw, will take in 4 ft. 6 in. diameter, all complete.

ONE SELF-ACTING SLIDE LATHE, bed 20 ft. long, double geared headstock, 14 in. to centre, with strong compound slide rest on the carriage.

FOUR SELF-ACTING SLIDE LATHES, beds 10 ft. 4 in. long, double geared headstocks, 8½ in. to centre, with self-acting motion, &c., complete.

TWO SELF-ACTING SLIDE LATHES, double geared, VERTICAL, COLUMN DRILLING AND BORING MACHINES, to take in 2 ft. from the centre, to drill from ¼ to 30 in. diameter, all complete.

TWO SELF-ACTING, DOUBLE GEARED, VERTICAL, COLUMN DRILLING AND BORING MACHINES, to take in 15 in. from centre, to bore from ¼ to 12 in. diameter, complete.

THREE STRONG PLANING MACHINES, to plane 6 ft. 6 in. long, 3 ft. 2 in. wide, and 2 ft. 6 in. high, with strong cross slide and tool box, self-acting in horizontal, vertical, and angular cuts, complete.

ONE LATHE, to plane 11 ft. long and 3 ft. square.

FOUR 12 IN. COMPOUND SLIDE RESTS, will slide 2 ft. by 8 in.

LATHE BEDS always on stock, and can be made any length required, and from any pattern or drawing.—Address, THOS. CRAVEN and SON, 33, Lower King-street, or Vauxhall Ironworks, Collyhurst-road, Manchester.

TWO 12-HORSE HORIZONTAL HIGH-PRESSURE STEAM-ENGINE, bore of cylinder 12 in., length of stroke 9 ft., wrought-iron fly-wheel shaft, fly-wheel, governor, force pump, &c., all complete, on strong iron foundation.

ONE 12-HORSE VERTICAL HIGH-PRESSURE STEAM-ENGINE, bore of cylinder 9 in., stroke 18 in., with fly-wheel, governor, force pump, and all complete.

ONE BOILER, on the Cornish principle, suitable for the above, 9 ft. long, 4 ft. diameter; five through 3 ft. 2 in. diameter, with wrought-iron dome, safety-valves, and all the mountings, &c., complete.—THOS. CRAVEN and SON, 33, Lower King-street, or Vauxhall Ironworks, Collyhurst-road, Manchester.

ENGINEERS, SHIPBUILDERS, RAILWAY COMPANIES, CONTRACTORS, &c.—Messrs. THOS. CRAVEN and SON beg to draw the attention of the above parties to the COMPLETE STOCK, NOW ON HAND, of the best MECHANICAL TOOLS of every description; also, STEAM-ENGINES of the most modern construction, suitable for winding or stationary purposes, from 2-horse power.—Address, THOS. CRAVEN and SON, 33, Lower King-street, or Vauxhall Ironworks, Collyhurst-road, Manchester.

MINING INVESTMENT.—WEST ABERFROD.—TO BE SOLD, a very valuable MINE, situated in the heart of the best mining district in Cardiganshire. A shallow adit level has been extended for many fathoms, in the course of which there is a good course of ore now to be seen, and some tons of ore on the surface broken therefrom. A deep adit level has been commenced, and driven on the course of the lode for 20 fms., the lode yielding lead ore. To continue this level to the course of lead ore discovered in the shallow adit-level was the object of the present company; but a great portion of the mine being held by working miners in the adjacent neighbourhood, whose means are not sufficient to carry on the trial with spirit, is the only cause for parting with the property.—To inspect, and for further particulars, apply to the agent, FRANK NICHOLLS, Goginan, Aberystwyth.

ES. There is every facility for the working of water machinery, carriage light, and deep moderate.—March 3, 1855.

BITUMINOUS COLLIERIES.—TO BE SOLD, THE LEASEHOLD INTEREST IN TWO BEDS OF BITUMINOUS COAL, of the richest quality, running over an area of upwards of 400 acres. These beds, lying close together, are workable in conjunction; they are each about 5 ft. thick, and cross within the boundary. The strata are peculiarly regular and solid, as proved in corresponding ground adjoining (the underground workings in which for nearly three-quarters of a mile can be inspected). A station of the South Wales Railway is on the property, and a branch line of about 400 yards would complete the means of transit on the line. An opportunity is here presented of forming a colliery, with a capability of production to an almost unlimited extent, and at a comparatively small outlay.—For further particulars, apply to Mr. HENRY A. SMITH, United General Gas Company's Office, W. Austinfriths, London.

IRONSTONE.—A ROCK OF IRONSTONE TO BE SOLD, OR LET, on the terms that may be agreed upon, situated within 1½ mile of the town of Dolgelly, and about a mile of Penmaenpool, a mining place on the Barmouth River. There is a descent from the rock to the river.

Also TO BE SOLD, several good PROSPECTS OF MINING SETTS, and a SLATE QUARRY, adjoining Dolgelly, Clogau, Great Cambrian, and Prince of Wales Mines.—Apply to Mr. ELLIS REES, Dolgelly.

IRON AND TIN-PLATE WORKS (FOREST OF DEAN, GLOUCESTERSHIRE) TO BE LET, OR THE FREEHOLD TO BE SOLD. This property would be disposed of to an early applicant on most advantageous terms, under regular circumstances. The works have been recently erected, and are capable of making 800 boxes per week. A large stock of charcoal and other materials on the premises to be taken or not. For further particulars, address Mr. S. BIRK, No. 1, Albert-terrace, Albert-gate, Hyde-park.

VALUABLE COAL MINES IN THE FOREST OF DEAN, FOR SALE, BY PRIVATE CONTRACT, all the three GALE, or MINES OF COAL, called respectively THE PLUDS, THE BIRCHEN GROVE, and THE LYDBROOK DEEP LEVEL COLLIERIES, containing the well-known coal called the Colford Hill Delf vein of coal, which is of the average thickness of 6 feet and upwards. These three mines are situated adjoining to, and the latter abutting on, the Severn and Wye Railway, and containing together about 340 acres, the two first-named mines being maiden coal. These properties are situated within 300 yards of the iron and tin works of Messrs. Allaway and Co., and the Messrs. Russell's, at Lydbrook; and the whole can be effectively worked by means of levels, without the cost and expense of sinking pits or machinery, and the whole is believed to be level free. The navigable River Wye, which runs to Hereford, Monmouth, and Chepstow, is within a very short distance of these properties, and is connected therewith by the mid Severn and Wye Railway, which also conveys the coals from these mines to the shipping port of London, and also to the terminus of the Bullock Hill branch of the South Wales Railway, at Clunchbury, from which latter place the coals from these mines can be conveyed to London, and all intermediate towns and places on the Great Western Railway.

These properties are situated nearly adjoining the turnpike-road leading from Hereford, Ross, and Monmouth, into the Forest of Dean, and are the first collieries on coming into the Forest from those places.

There is a level driven into the coal in the Lydbrook Deep Level Gals, which has been worked to a very small extent, and the same may be made productive in a very short space of time, and at a very small outlay. Land sales to the amount of 500 or 400 tons per week, and shipping and general trade to the extent of 2000 tons per week, may be carried on, and sold from these collieries.

An Act of Parliament has been recently obtained by the Severn and Wye Railway Company, by which powers are given, authorizing the conversion of this tramway into a broad-gauge line of locomotive railway.

There is a royalty of 1d. per ton payable to the Crown on all coals raised out of the Pluds and Birchen Grove Mines, and a sleeping rent of 6d. per annum on each until opened; and a royalty of 1½d. per ton on coals raised from the Lydbrook Deep Level Gals; and a sleeping rent of 1d. per annum when not worked.

Any accommodation to a purchaser, part of the purchase money may remain on mortgage of the several mines, at 5 per cent.

For further particulars, and to treat, application to be made to Mr. A. SEYMOUR, surveyor, Newcastle-on-Tyne; or to the proprietor, Mr. Wm. COBBETT, Grovesend, Worcester, both of whom have maps, &c.; or to Mr. J. O. BRITTON, land and mine agent, Dudley, Worcestershire.

VALUABLE MINERAL PROPERTY IN THE FOREST OF DEAN, GLOUCESTERSHIRE.—TO BE SOLD, BY PRIVATE CONTRACT, all that valuable GALE or COAL MINE, containing, according to the authorised sections in extent and value being the well-known vein called the Colford Hill Delf vein, containing an average thickness of 6 ft. and upwards. All the other veins can be worked to a good profit. This property is called the EXTENSION COLLIERY, and contains a surface measurement of 196 acres. The coal from this mine can be conveyed from the pit's mouth to London, and all intermediate places and towns on the Great Western Railway, without change of carriage or break of gauge; the Bullock Hill branch of the South Wales Railway passing over the surface of this property for 1½ mile, and the pits to be sunk would be within 100 yards of the Clunchford Station on the said railway. This property will be sold subject to a royalty due to Her Majesty of 1½d. per ton on a sleeping rent of £3 a year till opened. Any quantity up to 500 tons per week can be raised and sold from this mine.

For further particulars, and to treat for the same, application to be made to Mr. A. SEYMOUR, surveyor, Newcastle-on-Tyne; or to the proprietor, Mr. Wm. COBBETT, Grovesend, Worcester, both of whom have maps and sections of the coal; or to Mr. J. O. BRITTON, mine agent, Dudley, Worcestershire.

VALUABLE IRONSTONE MINES.—INGLEBY MANOR, CLEVELAND.—TO BE LET, ON LEASE, FOR 99 YEARS, all the IRONSTONE, IRON ORE, and LIMESTONE, in the MANOR OF INGLEBY, in Cleveland, Yorkshire, belonging to the Right Hon. Lord De Lisle and Dudley, containing upwards of 2000 acres. The ironstone has been analysed, and found to contain from 30 to 49 per cent. of iron. There is limestone of good quality on the property.

The North Yorkshire and Cleveland Railway, now in course of formation, will pass through the property, and join the Leeds Northern Line of the North-Eastern Railway Company, thus affording communication with all the main lines of railway and the docks at Hartlepool and Middlesbrough.

Convenient ground near the railway will be let, if required, with the ironstone, for the erection of blast furnaces, and all other necessary buildings.

The Inglesby Manor will, on application, show the beds of ironstone; and for further particulars, apply to Mr. THOMAS R. FORSTER, No. 7, Ellison-place, Newcastle-on-Tyne.—June 27, 1855.

NEARLY MIDWAY BETWEEN SHEFFIELD AND ROTHERHAM, AND WITHIN AND SHEFFIELD AND ROTHERHAM STATIONS ON THE MIDLAND RAILWAY, A COAL AND IRONSTONE UNDER THE HOLMES AND JORDAN DAM ESTATES, the former containing about 150, and the latter about 100 acres, surface measure. In the Holmes Estate, the Tinsley Park Furnace (bed 7 ft. 9 in.), and in the Jordan Estate, the Old Park Coal (5 to 6 ft.), and the Tinsley Coal (4 ft. thick); may all be conveniently worked, and are at a reasonable depth from the surface.

In addition to the very large local consumption by the adjacent iron and other works, the Dun Kington, and the Sheffield and Rotherham and Midland Railways, with ready-formed sidings, run through the estates, and afford unusual facilities for the transportation of the coals, and other materials.

The properties have been thoroughly worked by boring; and it is believed that a considerable acreage of the same beds of coal may be advantageously worked from the adjoining estates.

These minerals will be let either to an individual or to a company; and in the latter case the owner would be disposed to take a considerable interest in the undertaking.

For further particulars, apply personally to Mr. H. HARR, Wakefield; or to Mr. A. HARR, Rotherham.—July 11, 1855.

RAILWAY WAGONS.—WM. A. ADAMS, MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS
IN STOCK—FOR SALE OR HIRE.

RAILWAY WHEEL AND AXLE WORKS.—GEORGE WORSDELL AND CO., WARRINGTON, MANUFACTURERS OF EVERY DESCRIPTION OF HAMMERED IRON, TYRES, AXLES, &c.

INGLIS AND CHISHOLM, MANCHESTER, MAKE SMALL STEAM-ENGINES FOR MINERS, CONTRACTORS, &c.; also, DRILLING, PUNCHING, AND SHEARING MACHINES, AND OTHER TOOLS, of the best quality, at a reasonable price.—Address, INGLES and CHISHOLM, Charles-street, Garraff, Manchester.

TO IRONMASTERS, MERCHANTS, CONTRACTORS, FOUNDEES, &c.—Messrs. DAUNT and MOFFAT, METAL BROKERS, 59, ST. VINCENT STREET, GLASGOW, OFFER THEIR SERVICES FOR THE PURCHASE AND SALE OF PIG AND MANUFACTURED IRON.

All orders carefully executed, and prompt shipments made.

MR. WILLIAM NAISH, of NEWPORT, MONMOUTHSHIRE
INSPECTOR OF RAILS, begs most respectfully to acquaint merchants, brokers, engineers, and others connected with the British iron trade, that he still continues to EXECUTE ORDERS OF INSPECTION throughout the various districts of SOUTH WALES and adjacent ironworks, and confidently refers to the satisfaction which his superintendence has given during the last twelve years, to exporters of rails to the United States and the Continent, as well as Continental Europe, as a proof of the fidelity, carefulness, and promptitude of his inspections.

Mr. NAISH is efficiently assisted by his son, whose competent experience enables him to represent Mr. Naish during his occasional absence from home, so that no delay can possibly accrue to parties desirous of having their orders executed with skill and dispatch.—Newport, Monmouthshire, June, 1855.

THE MIDLAND IRON COMPANY, ROTHERHAM, YORKSHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR LOCOMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS. From the tests to which this iron has been submitted by engineers and railway companies during several years, its superior quality has been generally acknowledged, and cannot be hesitatingly affirmed.

RAILWAY WAGONS TO BE LET ON HIRE.—FIVE CRANES TO BE SOLD.—The WHITBY STONE COMPANY have THIRTY-FIVE CRANES WAGONS TO LET. The wagons are constructed with loose bodies, so as to allow them to be taken off by crane, and to discharge into ship or carriage without manual labour. They are well adapted for the ironstone or blockstone trade. The cranes are from 6 to 15 tons power.—Apply to Mr. WADDINGTON, Whitby, Agent for the Whitby Stone Company.

THE PERMANENT WAY COMPANY, holding a large number of PATENTS relating to the CONSTRUCTION AND REPAIRATION OF THE PERMANENT WAY OF RAILWAYS, are at all times ready to communicate on the subject, and to GRANT LICENSES for their USE.

From the facilities thus afforded to companies to negotiate for a number of inventions, much trouble and chance of litigation is avoided. The company undertake arrangements for bringing new inventions on the subject before the public, upon terms advantageous to the proprietors of patents.

Applications may be made to CHARLES MAY, F.R.S., the manager, or to 26, Great George-street, Westminster.

GEELONG AND MELBOURNE RAILWAY COMPANY.
Incorporated by an Act of the Victoria Legislature, 8th February, 1853.

Capital £350,000, in 17,500 shares of £20 each.
Bearing a minimum interest of 5 per cent. per annum.

Guaranteed by the Colonial Government for 21 years, and payable half-yearly, viz., on 20th April and 20th October, in the colony and in London.

DIRECTORS.
Elected by Shareholders: CHARLES NUTTALL THORNE, Esq., J.P.—PRESIDENT.
JAMES BUCHANAN HUTTON, Esq.—VICE-PRESIDENT.
GEORGE BOARD, Esq.
W. G. McKELLAR, Esq., J.P.
Appointed by CHAIRMAN EDWARD STRUTT, Esq., J.P., Immigration Agent.
Government: JOHN GUTHRIE, Esq., J.P., Collector of Customs.
Solicitor: J. A. Gregory, Esq.
Engineer and Architect: Edward Snell, Esq.
Secretary: Martin Sholl, Esq.
BANKERS—Bank of New South Wales; Bank of Victoria.

MANAGER—S. J. Cooke, Esq., 36, Cannon-st., late Treasurer to the Colonial Government, and a Director of the Company.

AGENTS—Messrs. Larnach and Walker, 37, Cannon-street.

EXAMINING ENGINEERS—Daniel Good, Esq., C.E., Great-Western Railway; Henry Stothert, Esq., Bristol.

SOLICITORS—Messrs. Goodwin and Co., 3, Lancaster-place, Strand.
BANKERS—London Joint-Stock Bank; Bank of New South Wales.

Uniform Colonial gauge of 5 ft. 3 in., as fixed by Legislative Enactment.

His excellency Sir Charles Hotham, Governor of Victoria, with the advice and consent of his Executive Council, having guaranteed a minimum interest of 5 per cent. per annum out of the Crown revenue of the colony, upon the entire capital stock of this company—viz., £350,000—the directors have placed a limited number of shares for allotment, fully paid up, through their London agency, the interest being computed from the date of payment.

Interest warrants will be ready for issue at the company's London office (now permanently established) to the shareholders on April 20th and October 20th of each year. The fourth half-year's interest was paid on the 20th April last.

The Colonial Government, deeply impressed with the importance of this undertaking, has conceded great privileges to this company. Large and valuable grants of land for the line and stations have been made, including 13 acres in the centre of the town of Geelong, for the terminal, with harbour frontages for the piers and wharves, the total value of which is not short of £120,000, being equal to one-third of the capital stock of the company, added by way of bonus to the shareholders.

The level nature of the country through which the line passes, whilst offering no engineering difficulties, and involving no expensive works whatever, is highly fertile, and already occupied by a thriving and increasing agricultural and manufacturing population.

By advices, dated 9th March last, information has been received of the favourable progress of the works, accelerated much by a reduction in the labour market. The completion of the pier and harbour branch has given considerable satisfaction to colonial shareholders, both from the facilities it affords to commercial operations in the town and district, and the encouraging prospect of revenue which it opens to the company.

Large supplies of rails and materials have been already landed in the colony, and the first shipments of locomotives and carriages have just been made by the Aulofar from London, and the Donald MacKay from Liverpool. Contracts have been concluded for all the plant and rolling stock required for the effective working of the line (which is expected partially to be open during the present year), and the whole of which is to be delivered within the next six months.

The first series of shares reserved for this market have been issued, and the sealed certificates delivered to the allottees.

Applications are invited for the unallotted portion of the guaranteed stock, which will not be received at less than par—£20 shares, interest taking effect from the date of payment, and so endorsed upon the share certificates. S. J. COOKE, Manager.

Geelong and Melbourne Railway Company's Offices,
36, Cannon-street, City, July 6, 1855.

FORM OF APPLICATION FOR SHARES.
To Messrs. Larnach and Walker, 37, Cannon-street, London.

GENTLEMEN,—I request that you will all to me guaranteed shares of £20 each in the Geelong and Melbourne Railway Company, at; and I hereby undertake to accept them, or a less number, and to pay for the same on receipt of the allotment letter, receiving in exchange the share certificate bearing the common seal of the company.

Name.....
Address.....
Profession or business.....
Usual signature.....

Date.....

DR. COLLYER'S AUSTRALIAN GOLD, TIN, AND COPPER MACHINERY.—Dr. COLLYER informs those who are interested in mining property that he has APPOINTED RANSOMES and SIMS SOLE MANUFACTURERS IN ENGLAND of his PATENT MACHINERY; and that they are prepared to SUPPLY the same on the following cash terms:—

Large size crusher, with shoes, capable of reducing from 10 to 12 tons of ore per day. Power required (say) eight horses..... £120 0 0
Small size crusher, 3 to 5 tons per day. Power required (say) three horses..... 90 0 0
Gold separator, capable of washing alluvial earth, from 10 to 12 tons per day. Hand-power..... 50 0 0
Extra shoes, large size, £20; small ditto £10 each—capable of reducing 1000 tons. (No part of this machinery exceeds 15 cwt.)

N.B. These machines are particularly adapted for the reduction of tin ores.—For further particulars, address RANSOMES and SIMS, Ipswich.

HALSEY'S PATENT CRUSHER AND AMALGAMATOR.
This machine is NOW IN OPERATION at ESSEX WHARF, ESSEX STREET, STRAND. GOLD ORES carefully TESTED on the following terms, including the use and distillation of mercury:—

Samples not exceeding 5 cwt..... £1 10 0
" " " 10 cwt..... 2 0 0
" " " 1 ton..... 2 15 0
" " " 2 tons..... 3 15 0
" " " 4 tons..... 4 10 0
" " " 8 tons..... 5 0 0

Larger quantities by special agreement. Price of the machine complete, £200.

TO ARCHITECTS, SLATE MERCHANTS, BUILDERS, AND OTHERS.—The DIRECTORS of the MACHINO SLATE AND SLAB COMPANY having completed their arrangements for the REMOVAL of their SHIPPING PORT to CONWAY, for the convenience of vessels unable to lower their masts to pass the tubular bridge, are now PREPARED to RECEIVE ORDERS for their justly celebrated SLABS and SLATES, from the Ffestiniog vein, which for beauty of colour and durability are unequalled.

The slabs have been largely used in the construction of houses for Australia, and from the facility with which they are erected and removed, are well adapted for movable huts for men and horses at the proposed camps in England and Ireland.

All applications to be addressed to Mr. T. H. WHEELER, the resident director, at the company's office, Conway, North Wales.

NEARLY NEW WATER-WHEEL FOR SALE.—TO BE DISPOSED OF, BY PRIVATE CONTRACT, a 50 H.P. WATER-WHEEL, 5 ft. diameter, with cast-iron rings, axles, centres, and fittings, complete, made by Colley and Co., London.—Application to be made to the proprietors, Messrs. JOHN and EDWARD FETTER, ironfounders, Barnstable.—May 29, 1855.

LEE STEVENS'S PATENT FURNACES comprise an established SYSTEM OF SMOKE PREVENTION AND ECONOMY OF FUEL, for all manufacturing purposes, from the smallest pan to the largest copper or boiler; and is remarkable for simplicity, cheapness, and facility of adaptation. Average saving of fuel, 20 per cent. Drawings of hundreds of furnaces in successful operation, testimonials, official reports, &c., may be seen at 1, Fish-street-bill, City.

CANDLES AND TALLOW FOR MINES.—PALMER and CO.'S PATENT PALM CANDLES, and PATENT OPERATIVE CANDLES, neither of which require snuffing, at prices below those of all other mining candles.

Wholesale agent, JOSEPH DUNSTON, Truro, by whom a stock is kept on hand, and also of the ordinary mining candle. Delivered free of carriage when orders for 100 dozen and upwards are given.—Lemon Yard, Truro, May 23, 1855.

OVERLAND ROUTE.—STEAM TO INDIA AND CHINA, &c.
VIA EGYPT.—The PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS AND RECEIVE GOODS AND PARCELS for the MEDITERRANEAN, EGYPT, AEN, BOMBAY, CEYLON, MADRAS, and CALCUTTA, by their mail packets leaving Southampton on the 4th and 20th of every month; and for CHINA and the STRAITS, by those of the 4th of the month.

For further particulars, apply at the company's offices, No. 132, Leadenhall-street, London; and Oriental-place, Southampton.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE
MEDAL WAS AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

Address.—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON and CO., PEN-HALLICK, near REDBUTH, CORNWALL, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe. Messrs. BRUNTON & CO. are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE direct from their own MANUFACTORY, upon warrant that it will prove equal to, if not better, than any to be procured elsewhere.

PATENT IMPROVED WIRE ROPE WORKS, MILLWALL, POPLAR.—A. J. HUTCHINGS, and CO., Sole Makers to the Lords of the Admiralty.—BOBNET and FLAT ROPE, of every description, suitable for mining operations or other purposes. GALVANIZED or UNGALVANIZED, MANUFACTURED upon an IMPROVED PRINCIPLE, ensuring great pliability and durability. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.

GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c.

Offices, 117, Fenchurch-street, London.

IMPROVED PATENT WIRE ROPE.—Mr. ANDREW SMITH, the ORIGINAL INVENTOR OF WIRE ROPE, LIGHTNING CONDUCTORS, and SUBMARINE TELEGRAPHS, solicits the attention of the public to his IMPROVED PATENT MANUFACTURE, as the best and cheapest, having obtained his sixth patent since 1835.—Office, 69, Princes-street, Leicester-square, London.

HENRY J. MORTON AND CO.'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPES, for the use of MINES, COLLIERIES, RAILWAYS, &c.; one-half the weight of hemp rope, and one-third the cost; one-third the weight of chains, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom.

GALVANIZED SIGNAL CORDS AND KNOCKER LINES; will not rust or corrode, and not affected by the copper water in mines. Very strong, and not at all liable to break. Prices from 15s. per 100 yards.

PATENT ASPHALTED ROOFING FELTS, 1d. per foot.

DRY HAIR BOILER FELTS, to save COAL.

PATENT BOILER COMPOUND, for bad water.

FAIRBANK'S WEIGHING MACHINES, of all sizes.

GALVANIZED IRON ROOFING AND SPOUTING.

MILNER'S FIRE-PROOF SAFES.

STOCK OF MINING AND RAILWAY STORES in Liverpool and London:—viz., OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES, &c.; and at very low prices.—Address, 2, Basinghall-buildings, Leeds.

SOLE AGENTS for Prof. GLUKMAN'S ELECTRIC SIGNAL from RAILWAY GUARD to ENGINE DRIVER, and also for the use of COLLIERIES and MINES.

N.B. Illustrated price list on application.

MORTON'S PATENT WIRE ROPES.—HENRY J. MORTON AND CO., GALVANIZED IRON ROOFING AND SPOUTING WORKS, 2, BASINGHALL BUILDINGS, LEEDS.

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Late Lecturer on Chemistry in the Newcastle College of Medicine, and formerly Assistant in the Laboratory of the Highland and Agricultural Society.

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THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.	Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120	Alfred Consois (copper), Phillack	£11s. 10d.	£17	19 1/2	21	£13 0 0	40	4000	Conemaure, Galway	4	1	1	1
6930	Algonis Consois Slate Quarry	2	1 1/2	1 1/2	1 1/2	0 0 0	10	1000	Cook's Kitchen, Illogan	£15 10 0	3	3	3
2000	Anglesa Coal Company	7	7	7	7	0 0 0	10	2000	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1221	Ballewidden (tin), St. Just	11 1/2	6	6	6	12 5 0	0	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
5930	Bat Holes, Worthy, Salop	17 1/2s. 6d.	10 1/2	10 1/2	10 1/2	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
4991	Bedford United (copper), Tavistock	27 6s. 8d.	10 1/2	10 1/2	10 1/2	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
5900	Black Craig (lead), Kirkcubright	9 1/2	150	145 155	350 5 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
200	Botallack (tin, copper), St. Just	9 1/2	150	145 155	350 5 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1000	Carn Brea (copper, tin), Illogan	15	85	175	221 10 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2048	Carayorth (tin), St. Just	1	1 1/2	2 1/2	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2050	Castle Slate Quarry, Dolwyddelan	1	1 1/2	2 1/2	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2050	Comford (copper), Gwynnapp, Cornwall	75	102 1/2	102 105	58 0 0	3 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2050	Condurow (copper, tin), Camborne	20	102 1/2	102 105	58 0 0	3 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
128	Cwmystwith (lead), Cardiganshire	60	185	185	45 0 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1024	Devon Great Consols (copper), Tavistock	1	362 1/2	370	442 0 0	9 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
12000	Dhurro (copper), Ireland	1	75	75	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
171	Dolcoath (copper, tin), Camborne	257 1/2	75	75	875 4 0	3 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
12000	Drake (tin, copper), Calstock	11 9/16	75	75	240 10 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
128	East Darnell (lead), Cardiganshire	33	12	100 165	240 10 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1024	East Wheal Margaret, Illogan	24 1/2	12	20	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1200	Eyan Mining Company, Derbyshire	35	20	20 20 1/2	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
494	Fowey Consols (copper), Tywardreath	40	30	30	399 13 0	1 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2240	Foxdale, Isle of Man	71 10s. 6d.	30	30	44 7 1/2	1 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
320	General Mining Co. for Ireland (cop. lead)	25	30	30	5 4 0	1 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
4448	Goginan (lead), Cardiganshire, Wales	3	3	3	1 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2000	Goginan (lead), Cardiganshire, Wales	3	3	3	1 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1024	Goginan (lead), Cardiganshire, Wales	3	3	3	1 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
8000	Great Crinns (copper), St. Austell	1	1	1	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
13750	Great Crinns (copper), St. Austell	1	1	1	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
8000	Great South Toluca	4 1/2	2	1 1/2	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2666	Great Wheal Vor (tin, copper), Helston	2 1/2	5 1/2	5 1/2	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
119	Great Wheal Vor (tin, copper), Helston	100	260	260	181 10 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1024	Herodston (lead), near Liskeard	8 1/2	2	1 1/2	2 12 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
6000	Holmston Down Consols (copper), Calstock	3 1/2	11 1/2	11 1/2	1 9 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1000	Holmston (lead, copper), Calstock	25	11 1/2	11 1/2	25 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2000	Holmston (lead, copper), Calstock	11	11 1/2	11 1/2	25 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
76	Jamaica (lead), Mold, Flintshire	37 13s. 6d.	—	—	380 0 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2048	Kennegry (copper), Breage	3s. 6d.	—	—	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
786	Kirkcubright (lead), Kirkcubright	9 1/2	—	—	1 15 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2000	Lackanore (copper), Tipperary, Ireland	1	—	—	0 0 0	0 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
20	Laxey Mining Company, Isle of Man	100	1000	1000	1300 0 0	50 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
5000	Lewis (tin, copper), St. Erth	31 8s.	1	1	1046 0 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
150	Levant (copper, tin), St. Just	2 1/2	120	115 125	223 15 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
400	Lisburne (lead), Cardiganshire, Wales	18 1/2	200	200	223 15 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
200	Machno Slate and Slab Company	25	29	29	2 10 0	1 5 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
160	Ditto (New Shares)	25	29	29	2 10 0	1 5 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
6000	Marke Valley (copper), Cardigan	10 1/2s. 6d.	18 1/2	5 1/2	0 2 0	0 2 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
5000	Mendip Hills (lead), Somerset	10 1/2s. 6d.	2	2	0 17 0	0 7 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
5000	Merilyn (lead), Flint	21 1/2s.	14	14	1 11 0	0 7 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2000	Mining Co. of Ireland (copper, lead, coal)	7	16	14	1 11 0	0 7 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
5000	Nantes and Penrhyn	1 1/2	1 1/2	1 1/2	0 1 0	0 1 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
7500	Nantlle Vale (lead), Llanfyllin	1	1 1/2	1 1/2	0 3 0	0 3 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
7500	Ditto	1	1 1/2	1 1/2	0 3 0	0 3 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
470	Newtown Mining Company, Co. Down	50	—	—	41 0 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
500	North Pool (copper, tin), Penryn	22 1/2	27 1/2	27 1/2	324 0 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
140	North Rosecar (copper), Camborne	70	27 1/2	27 1/2	249 10 0	4 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
6000	North Wheal Basset (copper, tin), Illogan	28 1/2	27 1/2	27 1/2	4 11 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
6400	Par Consols (copper), St. Blazey	1 1/2	12	12 1/2	23 6 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
500	Peak United (lead), North Derbyshire	7 1/2	8 1/2	8 1/2	3 10 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1160	Perran St. George (cop. tin), Perranarabute	21 1/2	15	15	1 15 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
200	Phoenix (copper, tin), Linkinghorne	30	300	300	50 0 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1000	Polybor (tin), St. Agnes (Preferential)	15	—	—	20 4 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
500	Providence Mines (tin), Uly Lelant	20 1/2	40	20	8 0 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
256	Rosewarne United (copper, tin), Gwynnapp	24	210	209	8 0 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
256	South Caradon (copper), St. Cleer	2 1/2	305	300 310	364 0 0	20 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
128	South Crinns (copper), St. Austell	19	305	300 310	364 0 0	20 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
9000	South Toluca (copper), St. Austell	17 1/2s. 6d.	3 1/2	7 1/2	2 11 0	0 6 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
256	South Toluca (copper), St. Austell	17 1/2s. 6d.	3 1/2	7 1/2	2 11 0	0 6 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
248	South Wheal Francis (copper), Illogan	37 1/2	550	500	303 5 0	15 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1024	Spearne Consols (tin), St. Just, Cornwall	1 1/2	—	—	8 8 0	0 2 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
280	Spearne Moor (copper), St. Just	14	—	—	1 0 0	1 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1024	St. Aubyn and Grylls (copper, tin), Breage	3	2	2	0 17 0	0 6 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
94	St. Ives Consols (tin), St. Ives	80	100	100	11 10 0	3 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1000	Stray Park and Camborne Vein (copper)	10 1/2	2	1 1/2	4 11 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
9600	Tamar Consols (silver-lead), Beralston	4 1/2	2	1 1/2	6 18 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
6000	Tinocott (copper, tin), near Pool, Illogan	9	5	4 1/2	6 18 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2048	Trehan (silver-lead), Menheniot	9	5	4 1/2	6 18 0	0 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
572	Trehan Consols (tin), St. Ives	11 1/2	24	24	1 15 0	1 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
96	Trevelyan (copper), Gwynnapp, Cornwall	32 1/2	150	150	467 15 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
120	Trevelyan (copper), Gwynnapp, Cornwall	10 1/2	—	—	403 15 0	2 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
10000	Trevelyan (copper), Gwynnapp, Cornwall	1	—	—	403 15 0	2 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
120	Trevelyan (copper), Gwynnapp, Cornwall	1	—	—	403 15 0	2 10 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
4000	Trevelyan (copper), Gwynnapp, Cornwall	130	2 1/2	2 1/2	308 10 0	4 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1000	Trumpet Consols (tin), near Helston	95	—	—	55 0 0	5 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
400	United Mines (copper), Gwynnapp	40	195	195	47 5 0	2 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
1024	Wellington (copper, tin), Perranarabute	8 1/2	—	—	2 5 0	0 2 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
10000	Welsh Fostels (silver-lead), Talybont, Card.	5	—	—	0 15 0	0 5 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
2500	Ditto	5	—	—	0 15 0	0 5 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
6000	West Basset (copper), Illogan	1 1/2	31 1/2	31 1/2	3 15 0	0 15 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
256	West Caradon (copper), Liskeard	20	162 1/2	162 1/2	269 5 0	4 0 0	10	500	Crook's Kitchen, Illogan	£15 10 0	3	3	3
256													